Trevor M Cickovski
Associate Teaching Professor
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Education

2008   Ph.D., Computer & Information Science, University of Notre Dame, Notre Dame, Indiana, United States

Ph.D., Computer and Information Scien, University of Notre Dame, Indiana, United States

2005   M.S., Computer & Information Science, University of Notre Dame, Notre Dame, Indiana, United States

M.S., Computer and Information Scien, University of Notre Dame, Indiana, United States

Work Experience

Full Time Academic

Associate Professor, Computer Science, Eckerd College, St. Petersburg, FL, August 2014, August 2016 [Type Work Experience: Full Time Academic]

Assistant Professor, Computer Science, Eckerd College, St. Petersburg, FL, August 2008, August 2014 [Type Work Experience: Full Time Academic]

Research Assistant, Computer Science and Engineering, Laboratory for Computational Life Sciences (LCLS), University of Notre Dame, Notre Dame, IN, January 2001, July 2008 [Type Work Experience: Full Time Academic]

Scholarly Publications and Creative Activities

Article

Chatterjee, S., Saha, P., Bose, D., Stebliankin, V., Cickovski, T. M., Seth, R. K., ... Scott, G. I. (2022). Prior exposure to microcystin alters host gut resistome and is associated with dysregulated immune homeostasis in translatable mouse models. *Scientific Reports*.

Campos, M., Cickovski, T. M., Fernandez, M., Jaric, M., Wanner, A., Holt, G., ... Narasimhan, G. (2021). Lower Respiratory Tract Microbiome Composition and Community Interactions in Smokers. *PLoS ONE*.

Nunez-Castilla, J., Stebliankin, V., Baral, P., Balbin, C., Sobhan, M., Cickovski, T. M., ... Liberales, J. (2021). Molecular mimicry between Spike and human thrombopoietin may induce thrombocytopenia in COVID-19. *Science*.

Cickovski, T. M., Mathee-Narasimhan, K., Aguirre, G., Tatke, G., Hermida, A., Narasimhan, G., & Stollstorff, M. L. (2021). Individuals with Attention Deficit Hyperactivity Disorder have Altered Gut Microbiome. *Scientific Reports*.

Cickovski, T. M., Mathee-Narasimhan, K., Narasimhan, G., Campos, M., Fernandez, M., Wanner, A., ... Salathe, M. (2020). Smoking Associated Differences In The Microbiome Of The Lower Respiratory Tract.

Nayman, E., Polanco, F., Cickovski, T. M., Narasimhan, G., & Mathee, K. (2021). Microbiome Bioinformatic Tools: Default vs Personalized Programs. *Metabolites: Special Issue on "Microbiome and Metabolome"*

Connor, S., Paul, P., Cickovski, T. M., Narasimhan, G., & Mathee, K. (2021). NIH Integrative Human Microbiome Project (iHMP) Cohorts. *Microbiome*.

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Mathee, K., Cickovski, T. M., Deoraj, A., Narasimhan, G., & Stollstorff, M. (2020). Gut Microbiome and Neuropsychiatric Disorders: Implications for Attention Deficit Disorder. *Journal of Medical Microbiology*, *69*(1), 14–24.

Cickovski, T. M., Aguiar-Pulido, V., & Narasimhan, G. (2019). MATria: A Unified Centrality Algorithm. *BMC Bioinformatics*, *20*(S1), 278.

Cickovski, T. M., & Narasimhan, G. (2018). Constructing Lightweight and Flexible Pipelines Using Plugin-based Microbiome Analysis (PluMA). *Bioinformatics*, *34*(17), 2881–2888.

Cickovski, T. M., Peake, E., Aguiar-Pulido, V., & Narasimhan, G. (2017). ATria: A Novel Centrality Algorithm Applied To Biological Networks. *BMC Bioinformatics*, *18*(S8), 239–248.

Aguiar-Pulido, V., Huang, W., Suarez-Ulloa, V., Cickovski, T., Mathee, K., & Narasimhan, G. (2016). Metagenomics, Metatranscriptomics, and Metabolomics Approaches for Microbiome Analysis. *Evol Bioinform Online*, *12*(S1), 5–16.

Cickovski, T., Flor, T., Irving-Sachs, G. . ., Parda, J., Novikov, P., & Narasimhan, G. (2015). GPUDePiCT: A Parallel Implementation of a Clustering Algorithm for Computing Degenerate Primers on Graphics Processing Units. *IEEE/ACM TCBB*, *12*(2), 445–454.

Sweet, J. C., Nowling, R. J., Cickovski, T., Sweet, C. R., Pande, V. S., & Izaguirre, J. A. (2013). Long Timestep Molecular Dynamics on the Graphical Processing Unit. *Journal of Chemical Theory and Computation*, *9*(8), 3267–3281.

Vance, A., & Cickovski, T. M. (2012). A Case Study on Developing a Classroom Application Using Behavior-Driven Development. *American Journal of Undergraduate Research*, *11*(3), 9–16.

Cickovski, T., Chatterjee, S., Wenger, J., Sweet, C. R., & Izaguirre, J. A. (2010). MDLab: A Molecular Dynamics Simulation Prototyping Environment. *Journal of Computational Chemistry*, *31*(7), 1345–1356.

Cickovski, T., Aras, K., Swat, M., Merks, R. M., Glimm, T., Hentschel, H., ... Izaguirre, J. A. (2007). From Genes to Organisms Via the Cell: A Problem-Solving Environment for Multicellular Development. *Computing in Science and Engineering*, *9*(4), 50–60.

Cickovski, T. M., Huang, C., Chaturvedi, R., Glimm, T., Hentschel, H., Alber, M. S., ... Izaguirre, J. A. (2005). A Framework for Three-Dimensional Simulation of Morphogenesis. *IEEE/ACM TCBB*, *2*(4), 273–288.

Matthey, T., Cickovski, T., Hampton, S., Ko, A., Ma, Q., Nyerges, M., ... Izaguirre, J. A. (2004). ProtoMol, An Object-Oriented Framework for Prototyping Novel Algorithms for Molecular Dynamics. *ACM TOMS*, *30*(3), 237–265.

Izaguirre, J. A., Chaturvedi, R., Huang, C., Cickovski, T., Coffland, J., Thomas, G., ... Glazier, J. A. (2004). CompuCell, A Multi-Model Framework for Simulation of Morphogenesis. *Bioinformatics*, *20*(7), 1129.

Margolin, G., Gregoretti, I. V., Cickovski, T. M., Li, C., Shi, W., Alber, M. S., & Goodson, H. V. (2012). The Mechanisms of Microtubule Catastrophe and Rescue: Implications from Analysis of a Dimer-Scale Computational Model. *Mol Biol Cell*, *23*(4), 642–656.

Proceeding

Stebliakin, V., Baral, P., Balbin, C., Nunez-Castilla, J., Sobhan, M., Cickovski, T. M., ... Narasimhan, G. (2022). EMoMiS: A Pipeline for Epitope-based Molecular Mimicry Search in Protein Structures with Applications to SARS-CoV-2. Presented at the ISMB 2022.

Sazal, M., Ruiz-Perez, D., Cickovski, T. M., & Narasimhan, G. (2018). Inferring Relationships in Microbiomes from Signed Bayesian Networks (Vol. 1, p. 1). Presented at the IEEE 8th International Conference on Computational Advances in Bio and medical Sciences (ICCABS), Las Vegas, NV: IEEE. http://doi.org/10.1109/ICCABS.2018.8542086

Cickovski, T. M., Aguiar-Pulido, V., & Narasimhan, G. (2017). MATria, A Unified Centrality Algorithm (p. 278). Presented at the IEEE 7th International Conference on Computational Advances in Bio and medical Sciences (ICCABS), Orlando, FL: IEEE. http://doi.org/10.1109/ICCABS.2017.8114289

Cickovski, T., Aguiar-Pulido, V. . ., Huang, W., Mahmoud, S., & Narasimhan, G. (2016). Lightweight Microbiome Analysis Pipelines (pp. 225–227). Presented at the International Work Conference on Bioinformatics and Biomedical Engineering (IWBBIO16), Granada, Spain.

Cickovski, T., Peake, E., Aguiar-Pulido, V. . ., & Narasimhan, G. (2015). ATria: A Novel Centrality Algorithm Applied To Biological Networks. Presented at the IEEE 5th International Conference on Computational Advances in Bio and medical Sciences (ICCABS), Miami, FL: IEEE. http://doi.org/10.1109/ICCABS.2015.7344710

Cickovski, T., Sweet, C., & Izaguirre, J. A. (2007). MDL, A Domain-Specific Language for Molecular Dynamics. Presented at the 40th Annual Simulation Symposium (ANSS'07), Norfolk, VA: IEEE. http://doi.org/10.1109/ANSS.2007.26

"Chaturvedi, R., Izaguirre, J. A., Huang, C., Cickovski, T., Virtue, P., Thomas, G., ... Glazier, J. A. ". (2003). Multi-Model Simulations of Chicken Limb Morphogenesis (Vol. Lecture Notes in Computer Science, vol 2659, pp. "39–49"). Presented at the International Conference on Computational Science, Melbourne, Australia and St. Petersburg, Russia: Springer.

Cickovski, T. M., Manuel, A., Mathee, K., Campos, M., & Narasimhan, G. (2020). Effects of Various Alpha-1 Antitrypsin Supplement Dosages on the Lung Microbiome and Metabolome (Vol. Lecture Notes in Computer Science (LNCS), pp. 90–101). Presented at the IEEE 9th International Conference on Computational Advances in Bio and medical Sciences (ICCABS), Miami: Springer. http://doi.org/https://doi.org/10.1007/978-3-030-46165-2_8

Reports

Brandtner, D., Cickovski, T. M., & Izaguirre, J. A. (2005). *Interactive Molecular Dynamics*. Notre Dame, IN: University of Notre Dame.

Yau, C. B. B., Cickovski, T. M., & Izaguirre, J. A. (2005). *MDL: Molecular Dynamics Language*. Notre Dame, IN: University of Notre Dame.

Aras, K., Cickovski, T. M., Cieslak, D., & Huang, C. (2005). *Simulation of Chicken Limb Growth with Irregular Domain Shape*. Notre Dame, IN: University of Notre Dame.

Aras, K., Cickovski, T. M., & Izaguirre, J. A. (2005). *Empirical Evaluation of Design Patterns in Scientific Application*. Notre Dame, IN: University of Notre Dame.

Cickovski, T. M., Matthey, T., & Izaguirre, J. A. (2004). *Design Patterns for Generic Object-Oriented Scientific Software*. Notre Dame, IN: University of Notre Dame.

Presentation, Presented Papers, and Lectures

Castellanos, C., Bin-Feng, L., Sakthivel, A., Govindasamy, P., Nkwonta, C., Cickovski, T. M., ... Mathee, K. (2022). Resistome analysis of an extensively drug-resistant Pseudomonas aeruginosa isolate. In *Journal of Medical Microbiology*. Belfast, Ireland.

Sakthivel, A., Castellanos, C., Govindasamy, P., Dananjeyan, B., Cickovski, T. M., & Mathee, K. (2022). Genome analysis reveals the potential health risks conferred by an eggplant-associated Pseudomonas aeruginosa PPA14. In *Journal of Medical Microbiology*. Belfast, Ireland.

Nayman, E., Polanco, F., Hofstee, N., Schreiner, Z., Cickovski, T. M., Mathee, K., & Narasimhan, G. (2021). Generation of Microbial Compositions from 16S RRNA Sequences — Are You Generating Medically Meaningful Analyses? [Best Oral Presentation: Eric Nayman]. In *International Society of Microbiota*. Online.

Nayman, E., Polanco, F., Hofstee, N., Schreiner, Z., Firek, A., Cickovski, T. M., ... Narasimhan, G. (2021). Improving Accuracy of Microbial Compositions Derived from 16S rRNA Sequences. In *American Society for Microbiology*. Washington, DC.

Sazal, M., Cickovski, T. M., Mathee-Narasimhan, K., & Narasimhan, G. (2020). Inferring Causal Relationships in Microbiomes. In *American Society for Microbiology*. Chicago, IL.

Cickovski, T. M., Paul, P. N., Connor, S., Narasimhan, G., & Mathee-Narasimhan, K. (2020). Veillonellaceae - A Friend or Foe in a Microbiome or a Biomarker for Inflammation. In *American Society For Microbiology*. Chicago, IL.

Cickovski, T. M., Mathee-Narasimhan, K., Aguirre, G., Tatke, G., Stollstorff, M., & Narasimhan, G. (2020). Attention Deficit Hyperactivity Disorder and the Gut Microbiome. In *American Society for Microbiology*. Chicago, IL.

Sazal, M., Ruiz-Perez, D., Valdes, C., Cickovski, T. M., Stebliankin, V., Mehta, A., ... Narasimhan, G. (2019). Signed Bayesian Networks for Microbiomes. In *LatinX in AI*. Vancouver, CA.

Ruiz-Perez, D., Park, J. I., Cickovski, T. M., Kim, J. E., Lee, H., Cho, H., & Narasimhan, G. (2019). Role of Gut Microbiota and their Temporal Interactions in Kidney Transplant Recipients. In *LatinX in AI*. Vancouver, CA.

Ruiz-Perez, D., Park, J. I., Cickovski, T. M., Kim, J. E., Lee, H., Cho, H., & Narasimhan, G. (2019). Role of Gut Microbiota and their Temporal Interactions in Kidney Transplant Recipients. In *Society for Molecular Biology and Evolution*. Manchester, England.

Cickovski, T. M., & Narasimhan, G. (2018). Constructing Lightweight and Flexible Pipelines Using Plugin-Based Microbiome Analysis (PluMA). In *International Society for Computational Biology*. Chicago, IL.

Cickovski, T. M., Manuel, A., & Narasimhan, G. (2017). A Flexible and Lightweight Multi-Omics Analysis Pipeline Using Plugin-Based Microbiome Analysis. In *Stanford University*. Stanford, CA.

Cickovski, T. M., Manuel, A., & Narasimhan, G. (2017). Microbiome Analysis Pipelines: Present And Future. In *American Society for Microbiology*. St. Petersburg, FL.

Riggs, H., Cickovski, T. M., & Narasimhan, G. (2015). Graphics Processing Unit Biofilm Image Processing (GPUBIP). In *Embry-Riddle Aeronautical University*. Daytona Beach, FL.

Bryant, J. D., & Cickovski, T. M. (2014). An Environment for Prototyping Molecular Dynamics on the GPU in Python. In *Florida International University*. Miami, FL.

Cickovski, T. M., Flor, T., Irving-Sachs, G., Novikov, P., Parda, J., & Narasimhan, G. (2014). Hybrid Clustering Algorithms for Degenerate Primer Development on the GPU. In *NVIDIA*. San Jose, CA.

Vance, A., & Cickovski, T. M. (2012). Narwhal: A Case Study on Developing a Classroom Application Using Behavior Driven-Development. In *Stetson University*. Deland, FL.

McEwing, K. A., & Cickovski, T. M. (2010). MDInter: A Molecular Dynamics Graphical User Interface. In *University of North Florida*. Jacksonville, FL.

Cickovski, T. M. (2007). BioLogo: A Domain-Specific Language for Morphogenesis. In *Indiana University*.

Bloomington, IN.

Cickovski, T. M., Sweet, C. R., & Izaguirre, J. A. (2007). MDLab Tutorial. In *University of Minnesota*. Minneapolis, MN.

Cickovski, T. M. (2007). BioLogo: A Domain-Specific Language for Morphogenesis (Tutorial). In *Indiana University*. Bloomington, IN.

Cickovski, T. M., & Izaguirre, J. A. (2006). Domain-Specific Languages in Computational Biology. In *University of Illinois at Urbana-Champaign*. Urbana, IL.

Cickovski, T. M., Aras, K., Swat, M., Merks, R., Glimm, T., Hentschel, G., ... Izaguirre, J. A. (2006). CompuCell3D: A Problem Solving Environment for Multicellular Development. In *Indiana University*. Bloomington, IN.

Cickovski, T. M., & Izaguirre, J. A. (2006). BioLogo: A Domain-Specific Language for Morphogenesis. In *Indiana University*. Bloomington, IN.

Cickovski, T. M., & Izaguirre, J. A. (2005). The Molecular Dynamics Lab (MDLab). In *Interdisciplinary Center for the Study of Biocomplexity (ICSB)*. University of Notre Dame.

Cickovski, T. M., Merks, R. M. H., & Izaguirre, J. A. (2005). BioLogo: A Domain-Specific Language for Morphogenesis. In *Interdisciplinary Center for the Study of Biocomplexity (ICSB)* University of Notre Dame.

Cickovski, T. M., Aras, K., Swat, M., Merks, R., Glimm, T., Hentschel, G., ... Izaguirre, J. A. (2005). CompuCell3D: A Problem Solving Environment for Multicellular Development. In *Interdisciplinary Center for the Study of Biocomplexity (ICSB)*. University of Notre Dame.

Cickovski, T. M., Chaturvedi, R., & Izaguirre, J. A. (2005). CompuCell3D, A Framework for Three-Dimensional Simulation of Morphogenesis. In *SIAM*. Orlando, FL.

Cickovski, T. M., Chaturvedi, R., & Izaguirre, J. A. (2004). CompuCell: A Software Framework for Simulations of Morphogenesis. In *Indiana University*. Bloomington, IN.

Cickovski, T. M., & Izaguirre, J. A. (2003). BioLogo: An XML-Based Domain-Specific Language for Simulations of Morphogenesis. In *Western Illinois University*. Macomb, IL.

Cickovski, T. M., & Izaguirre, J. A. (2003). BioLogo: An XML-Based Domain-Specific Language for Simulations of Morphogenesis. In *Indiana University*. Bloomington, IN.

Creative Work and Production

Nowling, R. J., & Cickovski, T. M. (2012). *Prototype to Release: Software Engineering for Scientific Software Stanford University*. Stanford, CA: National Institute of Health.

Intellectual Property

Cickovski, T. M., Manuel, A., Mathee, K., Campos, M., & Narasimhan, G. (2020). Significance of Glutamine in Lung Microbiome of Alpha-1 Antitrypsin Deficiency (A1AD) and Chronic Obstructive Pulmonary Disorder (COPD) Patients. D2020-0077.

Teaching Innovation and Other Relevant Teaching Activities

Fall 2020 - Ongoing

Upstream-Downstream, Other Activities related to teaching innovations,

Design of a Unix dataflow manager

Unix Toolkit / Research, Innovations in Course Content / Presentation ,

Project: Students in my COP4604 (Unix Programming) course developed a tool that can manage dataflow between an upstream and downstream analyzer.

Students: Daniel Acosta, Andrew Bedon, Alex Lopez, Carlos Rodriguez

Dr. C's Guidelines for Honorlock Exams, Use of technology and software,

A set of videos demonstrating appropriate and inappropriate behavior on Honorlock exams.

Online testing, Production of Online or Hybrid Course Material ,

Available at: http://users.cs.fiu.edu/~tcickovs/Honorlock/

PipeViz, Other Activities related to teaching innovations,

Design of a Unix package that can visualize pipelines

Unix Toolkit / Research, Innovations in Course Content / Presentation ,

Project: Students in my COP4604 (Unix Programming) course developed a tool PipeViz for visualizing pipelines as a network, using Dot.

Students: Bruce Berrios, Rebecca Dupuis, Mohammad Hussain, Rafael Meza Farias, Christopher Puello

Fall 2020 - Spring 2021

CDA4101-RVC, New courses developed or significantly revised,

Asynchronous learning

Course restructuring, New Course - Creation/Delivery: Online,

Migrated CDA4101 (Structured Computer Organization) to an online setting. Restructured the course and incorporated new tools for asynchronous learning, including Zoom and Discord.

COP4604-RVC, New courses developed or significantly revised,

Asynchronous learning

Course restructuring, New Course - Creation/Delivery: Online,

Migrated COP4604 (Advanced Unix programming) to an online setting. Restructured the course and incorporated new tools for asynchronous learning, including Zoom, Discord, and Github.

CDA3102-(UHA/RVC), New courses developed or significantly revised,

Synchronous and asynchronous learning

Course restructuring, New Course - Creation/Delivery: Online,

Migrated CDA3102 (Computer Architecture) to hybrid and online sections. Restructured the course and incorporated new tools for synchronous/asynchronous learning, including Zoom and Discord

Spring 2020 - Ongoing

SCIS Evaluating Teaching Rubric, Other Activities related to teaching innovations,

Proposed rubric for Department of Computer Science

Evaluating Teaching, Development of discipline-based practice tools,

Proposed a rubric for evaluating teaching in the computer science discipline. Held meetings and collected feedback from faculty. Continue to make iterative modifications.

LMSStar, Use of technology and software,

Open source software for educators

Inter-LMS compatibility, Instructional Software Product ,

An open-source suite of scripts for converting between file formats of some of the most popular Learning Management Systems (LMS).Currently supported LMSs include: Gradescope, Canvas, and ZyBooks.

Fall 2019 - Fall 2020

BS in Cybersecurity, New courses developed or significantly revised,

Work with UGC colleagues

Cybersecurity Flowchart, New course Development Approved by Col or Dept ,

The B.S. in Cybersecurity prepares students for cybersecurity professional career with a primary focus on information security analysis.

New Fall 2020: https://www.cis.fiu.edu/academics/degrees/undergraduate/

Fall 2019 - Fall 2019

NVIDIA Deep Learning Institute (DLI), Undergraduate research projects,

Caffe plugin

Independent Study, Student Assign-Independent Studies ,

Student Supervised: Mark Fajet; FIU

Project: Effectively incorporate tools from NVIDIA's Deep Learning Institute (DLI, https://developer.nvidia.com/deep-learning) into a plugin extension for the PluMA package (http://biorg.cs.fiu.edu/pluma), and test performance with some examples that use machine learning.

Spring 2019 - Fall 2020

CDA3102: Computer Architecture, New courses developed or significantly revised,

Work with UGC colleagues

New SCIS hardware course, New course Development Approved by Col or Dept ,

Covers the levels of organization in a computer: digital logic; machine and assembly language programming, design of memory, buses, ALU, CPU; virtual memory, I/O

SCIS Curriculum Restructuring, Course coordination,

Work with UGC colleagues

Curriculum modification, New course Development Approved by Col or Dept ,

Due to the current structure of our current CS curriculum with only three elective courses, students are unable to take a cross-section of courses that expose them to emerging technologies, thereby reducing their placement opportunities. The emphasis of FIU's initiative on 4-year graduation rates requires the reduction in the length of the pre-requisite chain of courses in order for students to fulfill their graduation requirements. These changes allow students to take nine elective courses and reduce the prerequisite chain by one course. Impacted degrees include: BS and BA in Computer Science, BS in IT, and Computer Science Minor

Spring 2019 - Summer 2020

FIU Center for Advancement of Teaching (CAT) Fellow, Other Activities related to teaching innovations,

Communication, website design

CAT Evaluating Teaching(ET) website, Publicly Available Doc Describing the Design ,

Communicated with other CEC departments on Evaluating Teaching (ET) initative. Contact point for questions. Developed new ET website for CAT, now accessible University-wide via Panther180

Summer 2018 - Summer 2018

Certification Course for Farelogix Employees, New courses developed or significantly revised,

Training, assessment, professional certificate

C++ Certification Course, Delivery of Executive or Professional Education,

The purpose of this course to provide you with intermediate-level knowledge of the C++ language. This includes its syntax and semantics, how to capitalize on its object-oriented structure to build useful and extensible software packages, writing efficient code, and proper software design methodologies.

Spring 2018 - Ongoing

FIU Evaluating Teaching Project, Other Activities related to teaching innovations,

SCIS faculty representative

Department-specific teaching evaluation, Development of discipline-based practice tools,

Proposed and communicated SCIS teaching evaluation changes, arranged faculty meetings, liason for faculty with questions

Spring 2017 - Fall 2020

BA in Computer Science, New courses developed or significantly revised,

Work with UGC colleagues

New degree program, New course Development Approved by Col or Dept ,

The B.A in Computer Science (CS) is intended for students targeting a career in the computing field. The program provides a solid foundation in Computer Science blended with an interdisciplinary field of their choices such as Digital Media, Business, Economics and more and permits flexible elective courses to be taken outside of the discipline.

Spring 2016 - Spring 2016

Replacing Domain-Specific Methods in Bioinformatics with Machine Learning Techniques, Portfolios,

External member of Ph.D. dissertation committee

Ph.D. Thesis, Thesis / Dissertation Committee - Member ,

Student: Ronald James Nowling; University of Notre Dame

Spring 2016 - Fall 2020

GPU Documentation, Use of technology and software,

CUDA tutorial that continues to be used in CDA-4101 at FIU.

CUDA Tutorial, Instructor's Manual ,

Supported by NVIDIA's GPU Educators Program, wrote documentation on how to use the GPU for faculty at Eckerd College and FIU

Fall 2015 - Ongoing

Learning Assistant Program, Active learning techniques,

Built and executed an assessment plan

LA Assessment, Assurance of Learning - Teaching,

Active learning supported by the FIU STEM Transformation Institute's Learning Assistant (LA) program

NVIDIA GPU Educators, Use of technology and software,

Incorporated GPU into CDA4101 parallelism unit

GPU Computing, Existing Course - Compensated Redesign,

Received funding from NVIDIA to integrate GPU computing into the classroom

Incremental Interactive Projects (IPs), Other Activities related to teaching innovations,

Repository

CDA hardware projects, Innovations in Course Content / Presentation ,

Incremental Interactive Projects are projects that involve a real-world application of the course material and iteratively change every semester. They start from an initial state, which students work on improving as a semester project. One submission will then be uploaded permanently to the repository, creating a new and improved state. This then becomes the initial state of a future semester. The idea is to develop a perception of how course concepts can evolve, and forward thinking.

Plugin-Based Microbiome Analysis (PluMA), Undergraduate research projects,

Algorithm design, software engineering

REU, Student Assign-Supervised Research (UG) ,

Students Supervised: Cristina Alonso, Rob Panoff, Astrid Manuel, Alejandra Vasquez, Guillermo Barquero, Bhavyta Chauhan, Veronica Parra, Rishabh Vaidya, Cesia Bulnes, Roberto Hernandez, Amanda Martinez,

Darren Ellsworth, Matthew Floyd, Wendy Palacios, Joseph Quinn, Mariana Picans, Nicholas Sanchez; FIU

Project: Develop and test new algorithms for analyzing microbiome data and implementing them as plugins for PluMA (http://biorg.cs.fiu.edu/pluma) in a programming language of choice. Upon completion plugins get added to PluMA's public plugin pool and are subsequently available to others in the microbiome research community.

Physical Adder Construction, Active learning techniques,

Project for CDA3103/CDA3102

Hands-on learning, Innovations in Course Content / Presentation ,

Students construct a physical device that can add two values between zero and seven, using real silicon chips and copper wiring.

Fall 2015 - Fall 2020

Student Choice Interactive Project (IP), Other Activities related to teaching innovations,

For hardware course sequence

Capstone project, Innovations in Course Content / Presentation ,

The "student-choice" IP is conducted upon completion of a course sequence (i.e. computer hardware). It involves developing a topic, hands-on research, surveying of the literature, discovering a current void and developing a contribution (either an improvement or something brand new). To relate to my teaching philosophy, it is through this project that student move from perception to action, the "top" of the pyramid. The idea is that they achieve this upon "graduation" from a course sequence.

Summer 2015 - Summer 2015

Microbial Social Networks, Undergraduate research projects,

Metagenomics and network analysis

REU, Student Assign-Supervised Research (UG) ,

Students Supervised: Lawrence Irvin, Cameron Davis, Eli Peake; Eckerd College

Project: Perform social network analysis on a microbial ecological network, where edges indicate relationships (cooperation or competition) between members of a microbiome.   Collaboration between Eckerd College and FIU. Funding granted through Eckerd College Natural Sciences Summer Research Program (NSSRP), funded by Howard Hughes Medical Institute

Spring 2015 - Spring 2015

Moore's Law and Cryptographic Keys: A Case Study of Breaking RSA on the GPU, Undergraduate research projects,

Undergraduate thesis committee

Undergraduate Thesis, Student Assign-Supervised Thesis (UG Seniors) ,

Student: Galen Irving-Sachs; Eckerd College

Fall 2014 - Spring 2015

GPU Biofilm Image Processing (GPUBIP), Undergraduate research projects,

Fractal analysis of biofilm images

REU, Student Assign-Supervised Research (UG) ,

Students Supervised: Kyle Kempton and Hugo Riggs*; Eckerd College (* Hugo is now an FIU graduate student)

Project: Capitalized on the benefit of the GPU to efficiently analyze multiple biofilm images simultaneously and determine fractal dimension. This can help determine useful properties of the biofilm, such as maturity or level of nutrition.

Summer 2014 - Summer 2014

MDLab: A Framework for Prototyping Molecular Dynamics Simulations in Python on the GPU , Undergraduate research projects,

GPU molecular modeling

REU, Student Assign-Supervised Research (UG) ,

Students Supervised: Jonathan Bryant, Stephen Felman, Hugo Riggs*; Eckerd College. (* Hugo is currently an FIU graduate student)

Project: Explore options for parallelizing force calculations and image processing of biofilm data on the Graphics Processing Unit (GPU). Collaboration between Eckerd College, FIU, Notre Dame and Stanford. Funding granted through Eckerd College Natural Sciences Summer Research Program (NSSRP), funded by Howard Hughes Medical Institute

Spring 2014 - Spring 2015

Mathematical Patterns in Nature, New courses developed or significantly revised,

New short term course

New course, New course Development Approved by Col or Dept ,

In this class we will be studying a universal language, mathematics. While we have all grown up studying how to perform mathematics, this course will mainly center upon how it is applied, particularly in the natural world that we observe everyday. In fact we will see in this course, independent of our mathematical abilities we are very mathematical beings, in more ways than we probably have even realized. Mathematics in the natural world is a topic that we are continuing to know more about on a daily basis. There is a lot more to discover even today.

Fall 2013 - Fall 2013

GPU Computing in the Life Sciences, Undergraduate research projects,

Interdisciplinary computational science work

REU, Student Assign-Supervised Research (UG) ,

Students Supervised: Annie Rodgers; Eckerd College

Project: Write programs to run mathematical functions for use in molecular simulations in parallel using the Graphics Processing Unit (GPU). Collaboration between Eckerd College and Notre Dame. Funding available through the Freshman Research Associateship (FRA) program at Eckerd College

Summer 2013 - Summer 2013

Vitamin-GPU: Multiple Levels of Modeling Natural Processes on the Graphics Processing Unit (GPU), Undergraduate research projects,

Simulation and modeling

REU, Student Assign-Supervised Research (UG) ,

Students Supervised: Tiffany Flor, Galen Irving-Sachs, Cameron Crowson, Philippe Novikov; Eckerd College

Project: Parallelize and improve the speed of multiple levels of biological modeling for the Graphics Processing Unit (GPU), including molecular, genetic and cell modeling. Collaboration between Eckerd College, FIU, Notre Dame and Stanford. Funding granted through Eckerd College Natural Sciences Summer Research Program (NSSRP), funded by Howard Hughes Medical Institute

Fall 2012 - Spring 2013

Academy Prep Online Alumni Database, Service learning,

Computer Science Seminar

Online Alumni Database, Student Assign-Clinical/Practicum/Internship,

Led a service project for junior and senior computer science students at Eckerd College. Service project involved designing an online alumni database for Academy Prep Middle School in Tampa, FL.

Fall 2012 - Spring 2015

Discipline Coordinator of Computer Science, Eckerd College, Course coordination,

Departmental leadership role

Curriculum Assessment, Program Assessment Projects ,

Managed curriculum and degree requirements, incorporating new coursework, assessment. Led the effort to build a three-year assessment report for SACS during the period 2012-2015, which outlines several key modifications to the computer science curriculum that are still in existence at Eckerd College.

Summer 2012 - Summer 2012

GPU Parallelization of DePiCt, Undergraduate research projects,

GPU parallelism and primer design

REU, Student Assign-Supervised Research (UG) ,

Students: Phillippe Novikov and James Parda; Eckerd College

Project: Parallelize a known method for designing degenerate primers on the Graphics Processing Unit (GPU). These primers are used to amplify target regions of interest in DNA samples; degeneracy allows primers to have some uncertainty in their sequence data. Collaboration between Eckerd College and FIU. Funding granted through Eckerd College Natural Sciences Summer Research Program (NSSRP), funded by Howard Hughes Medical Institute

Spring 2012 - Spring 2012

Narwhal: A case study Developing a Web Application for the Classroom Utilizing Behavior Driven Development, Undergraduate research projects,

Advisor for thesis project, chair of undergraduate thesis committee

Undergraduate Thesis (Advisor), Student Assign-Supervised Thesis (UG Seniors) ,

Student: Austin Broce Vance, Eckerd College

Spring 2010 - Spring 2010

Nature-inspired Metaheuristics for Combinatorial Optimization Problems, Undergraduate research projects,

Undergraduate thesis committee

Undergraduate Thesis, Student Assign-Supervised Thesis (UG Seniors) ,

Student: Ronald James Nowling, Eckerd College

Spring 2009 - Spring 2015

Biology and the Game of Life, New courses developed or significantly revised,

New natural science elective course

New course, New course Development Approved by Col or Dept ,

This course is designed to provide an appreciation of the natural sciences in everyday life. Material in this course will encapsulate a wide variety of the natural sciences, including mathematics, biology, chemistry and physics and involve a great deal of computer simulation. At its most basic level however, I consider this to be primarily a philosophy course. We will explore various theories about methods by which natural processes operate and evolve, which has implications as farreaching as the origins of the universe. The primary question we will explore will be: Does life itself follow a simple set of mathematical rules?

Fall 2008 - Spring 2015

Eckerd College Coursework, Other Activities related to teaching innovations,

Assistant Professor of Computer Science, Eckerd College

Departmental and non-departmental courses, Classes taught outside of FIU,

Courses Instructed as an Assistant Professor at Eckerd College Computer Architecture, Compilers, Data Structures, Introduction to Computer Science, Computer Networks, Programming Languages, Quest for Meaning, Survey of Computing, Western Heritage in a Global Context

Summer 2007 - Summer 2010

MDInter: Interactive Molecular Dynamics, Undergraduate research projects,

Interactive interfaces to molecular dynamics simulations

REU, Student Assign-Supervised Research (UG) ,

Students Supervised: Dylan Brandtner and Chun Bong Benjamin Yau; Notre Dame, Kristofer McEwing; Eckerd College

Project: Develop effective ways to run molecular simulations interactively; this culminated in the development and presentation of a graphical tool MDInter at the University of North Florida.

Summer 2007 - Fall 2007

Notre Dame Coursework, Other Activities related to teaching innovations,

Graduate Instructor of Computer Science, Notre Dame

Advanced C++ Programming, Classes taught outside of FIU,

Served as Instructor for the Advanced C++ Programming course for the computer science department at University of Notre Dame.

Summer 2006 - Summer 2006

BioLogo: A Domain-Specific Language for Morphogenesis, Undergraduate research projects,

Domain-specific language development

REU, Student Assign-Supervised Research (UG) ,

Students Supervised: Troy Raeder; Notre Dame

Project: Develop an XML-based domain-specific programming language BioLogo that interfaces to the cell modeling software CompuCell3D.

Funded Research/Grants

Completed

An Epigenetic multiplex amplification for the determination of age and body fluid type, Funded by National Institute of Justice (January 1, 2018 - December 31, 2020) (**$368,512.00**), Completed, Fall 2020, CoPI Giri Narasimhan (0%) with PI Bruce Mc Cord (0%), Key Personnel Trevor Cickovski (0%) [Activity Considered Community Engagement/Community-Engaged Scholarship?: No] [Approval for Pre-award Spending: No] [Internal/External: External] [Type of Funding: Federal] [Type of Grant: Research]

Research Program Projects and Centers, Funded by National Institute of Justice (August 1, 2017 - June 1, 2019) (**$12,000.00**), Completed, Summer 2019, PI Bruce McCord with CoInvestigator Trevor Cickovski, CoInvestigator Giri Narasimhan, CoPI Kuppareddi Balamurugan [Activity Considered Community Engagement/Community-Engaged Scholarship?: No] [Approval for Pre-award Spending: No] [Internal/External: External] [Type of Funding: Federal] [Type of Grant: Research]

Data Intensive Academic Grid (DIAG, Equipment), Funded by University of Maryland (January 11, 2016), awarded March 18, 2016, Completed, Spring 2016, PI Trevor Cickovski with CoPI Giri Narasimhan [Activity Considered Community Engagement/Community-Engaged Scholarship?: Yes] [Approval for Pre-award Spending: No] [Internal/External: External] [Type of Funding: University / College] [Type of Grant: Equipment]

National Sciences Summer Research Program, Funded by Howard Hughes Medical Institute (June 4, 2012 - August 1, 2015), awarded March 15, 2012 (**$29,050.00**), Completed, Summer 2012, PI Trevor Cickovski [Activity Considered Community Engagement/Community-Engaged Scholarship?: Yes] [Approval for Pre-award Spending: No] [Internal/External: Internal] [Type of Funding: University / College] [Type of Grant: Research]

Faculty Development Grant, Funded by Eckerd College (August 3, 2009 - August 1, 2015), awarded August 1, 2009 (**$10,800.00**), Completed, Spring 2010, PI Trevor Cickovski [Activity Considered Community Engagement/Community-Engaged Scholarship?: Yes] [Approval for Pre-award Spending: No] [Internal/External: Internal] [Type of Funding: University / College] [Type of Grant: Internal]

Funded - In Progress

Bioinformatic Search for Epitope-based Molecular Mimicry in the SARS-CoV-2 Virus Using Chameleon, Funded by National Science Foundation (July 1, 2020), awarded June 8, 2020 (**$199,000.00**), Funded - In Progress, Summer 2020, PI Giri Narasimhan with CoPI Charles Dimitroff, CoPI Prem Champaign, CoPI Jessica Liberles, CoPI Ananda Mondal, CoInvestigator Kalai Mathee, CoInvestigator Trevor Cickovski, CoInvestigator Jason Liu [Activity Considered Community Engagement/Community-Engaged Scholarship?: Yes] [Approval for Pre-award Spending: No] [Internal/External: External] [Type of Funding: Federal] [Type of Grant: Research]

Florida IT Pathways to Success (FLIT-Path), Funded by National Science Foundation (January 9, 2017 - January 9, 2022), awarded September 16, 2016 (**$1,940,000.00**), Funded - In Progress, Spring 2017, CoInvestigator Trevor Cickovski with CoInvestigator Patricia McDermott-Wells, CoInvestigator Michael Robinson, CoInvestigator Debra Davis, PI Mark Weiss, CoPI Zahra Hazari, CoInvestigator Antonio Bajuelos Dominguez [Activity Considered Community Engagement/Community-Engaged Scholarship?: Yes] [Approval for Pre-award Spending: Yes] [Internal/External: External] [Type of Funding: Federal] [Type of Grant: Program]

CUDA Teaching Center Program, Funded by NVIDIA (September 2, 2013), awarded April 24, 2013 **$2,000.00**), Funded - In Progress, Spring 2013, PI Trevor Cickovski [Activity Considered Community Engagement/Community-Engaged Scholarship?: Yes] [Approval for Pre-award Spending: No] [Internal/External: External] [Type of Funding: Institutional] [Type of Grant: Training]

Submitted - Not Funded

HDR-DSC: RiDR - Riding the Data Revolution using a micro-credentialing approach, Funded by National Science Foundation (August 1, 2021 - July 31, 2024), awarded August 1, 2021 (**$1,497,394.00**), Submitted - Not Funded, Spring 2021, PI Giri Narasimhan with CoInvestigator Sneh Gulati, CoInvestigator Hartwig Hochmair, CoInvestigator Jennifer Fu, CoInvestigator Trevor Cickovski, CoInvestigator Mark Finlayson, CoInvestigator Ananda Mondal, CoInvestigator Gregory Reis, CoInvestigator Zoran Bursac, CoInvestigator Nazife Ganapati, CoInvestigator Sukumar Ganapati, CoInvestigator Kalai Mathee, CoInvestigator Shimon Wdowinski, CoInvestigator Michael Creeden, CoInvestigator Paul Feigenbaum, CoInvestigator Jessica Liberles, CoInvestigator Jamie Rogers, CoInvestigator Diana Ter-Ghazaryan, CoInvestigator Bridgette Cram, CoInvestigator Akkaya Aslihan, CoInvestigator Tameka Hobbs, CoInvestigator Nathan Green, CoInvestigator Shibu Yooseph [Activity Considered Community Engagement/Community-Engaged Scholarship?: Yes] [Approval for Pre-award Spending: No] [Internal/External: External] [Type of Funding: Federal] [Type of Grant: Program]

NSF Convergence Accelerator – Track D: AI-Driven Pipeline for Tackling Future Pandemic Due to Virus Infection , Funded by National Science Foundation (August 1, 2020), awarded May 15, 2020 (**$100,000.00**), Submitted - Not Funded, Summer 2020, PI Giri Narasimhan with CoPI Trevor Cickovski, CoPI Kalai Mathee, CoPI Prem Chapagain, CoPI Jessica Liberales, CoPI Ananda Mondal [Activity Considered Community Engagement/Community-Engaged Scholarship?: Yes] [Approval for Pre-award Spending: No] [Internal/External: External] [Type of Funding: Federal] [Type of Grant: Research]

RAPID: Bioinformatic Search for Epitope-based Molecular Mimicry in the SARS-CoV-2 Virus, Funded by National Science Foundation (August 1, 2020), awarded April 30, 2020 (**$100,000.00**), Submitted - Not Funded, Summer 2020, PI Giri Narasimhan with CoPI Trevor Cickovski, CoPI Kalai Mathee, CoPI Prem Chapagain, CoPI Jessica Liberales, CoPI Ananda Mondal [Activity Considered Community Engagement/Community-Engaged Scholarship?: Yes] [Approval for Pre-award Spending: No] [Internal/External: External] [Type of Funding: Federal] [Type of Grant: Research]

A multi-omic approach to study the rise and decline of a Harmful Algal Bloom, Funded by National Science Foundation (August 31, 2020 - August 31, 2025), awarded January 14, 2020 (**$2,191,892.00**), Submitted - Not Funded, Spring 2020, PI Giri Narasimhan with CoPI Trevor Cickovski, CoPI Kalai Mathee, CoPI Philip Gravinese, CoPI Jose Eirin-Lopez, CoPI Ziv Bar-Joseph, CoPI Fahad Saheed, CoPI Ananda Mondal [Activity Considered Community Engagement/Community-Engaged Scholarship?: Yes] [Approval for Pre-award Spending: No] [Internal/External: External] [Type of Funding: Federal] [Type of Grant: Research]

DaVaa, an App to control Antimicrobial Resistance Using Historical Medical Records, Funded by National Institute of Health STTR (March 1, 2020 - February 28, 2021), awarded September 5, 2019 (**$77,092.00**), Submitted - Not Funded, Spring 2020, PI Patricia Buendia with CoPI Trevor Cickovski, CoPI Kalai Mathee, CoPI Giri Narasimhan [Activity Considered Community Engagement/Community-Engaged Scholarship?: Yes] [Approval for Pre-award Spending: No] [Internal/External: External] [Type of Funding: Government] [Type of Grant: Research]

Miami Dade Cancer and Research Education Program in Ethnically Diverse Populations (MD CaREs), Funded by National Institute of Health (July 1, 2019 - June 30, 2022), awarded November 14, 2018 (**$1,414,463.00**),

Submitted - Not Funded, Summer 2019, CoInvestigator Trevor Cickovski with CoInvestigator Barbra Roller, CoInvestigator Iveris Martinez, CoInvestigator Kalai Mathee-Narasimhan, CoInvestigator Michael Paez, CoPI Giri Narasimhan, CoInvestigator Luther Brewster, CoInvestigator Cheryl Brewster, PI Carolyn Runowicz, CoInvestigator Alan Wells, CoInvestigator Tracey Weiler, CoInvestigator Katherine Chung, CoPI Wenrui Duan, CoInvestigator Alice Akunyili, CoPI Carla Lupi [Activity Considered Community Engagement/Community-Engaged Scholarship?: Yes] [Approval for Pre-award Spending: No] [Internal/External: External] [Type of Funding: Federal] [Type of Grant: Research]

Improving Hands-On Learning of Computer Hardware, Funded by Florida International University (August 1, 2018 - August 1, 2021), awarded March 30, 2018 (**$94,931.62**), Submitted - Not Funded, Fall 2018, PI Trevor Cickovski with CoPI Giri Narasimhan [Activity Considered Community Engagement/Community-Engaged Scholarship?: No] [Approval for Pre-award Spending: No] [Internal/External: Internal] [Type of Funding: University / College] [Type of Grant: Internal]

Inferring Relationships from Multi-omics Longitudinal Microbiome Data, Funded by National Science Foundation (August 1, 2019), awarded October 2, 2018 (**$849,118.00**), Submitted - Not Funded, Fall 2018, PI Giri Narasimhan with CoPI Trevor Cickovski, CoPI Jose Eirin-Lopez, CoPI Kalai Mathee-Narasimhan, PI Ziv Bar-Joseph [Activity Considered Community Engagement/Community-Engaged Scholarship?: Yes] [Approval for Pre-award Spending: No] [Internal/External: External] [Type of Funding: Federal] [Type of Grant: Research]

Miami Dade Cancer and Research Education Program in Ethnically Diverse Populations (MD CaREs), Funded by National Institute of Health (September 1, 2018 - August 31, 2022), awarded January 26, 2018 (**$511,208.00**), Submitted - Not Funded, Spring 2018, CoInvestigator Trevor Cickovski with CoInvestigator Barbra Roller, CoInvestigator Iveris Martinez, CoInvestigator Kalai Mathee-Narasimhan, CoInvestigator Michael Paez, CoPI Giri Narasimhan, CoInvestigator Luther Brewster, CoInvestigator Cheryl Brewster, PI Carolyn Runowicz, CoInvestigator Alan Wells, CoInvestigator Tracey Weiler, CoInvestigator Katherine Chung, CoPI Wenrui Duan, CoInvestigator Alice Akunyili, CoPI Carla Lupi [Activity Considered Community Engagement/Community-Engaged Scholarship?: Yes] [Approval for Pre-award Spending: No] [Internal/External: External] [Type of Funding: Federal] [Type of Grant: Research]

Analyzing and Modeling Microbiome Dynamics from Multi-Omics Time-Series Data, Funded by National Science Foundation (July 31, 2018 - July 31, 2018), awarded September 27, 2017 (**$753,090.00**), Submitted - Not Funded, Fall 2017, PI Giri Narasimhan with CoPI Trevor Cickovski, CoPI Jose Eirin-Lopez, CoPI Kalai Mathee-Narasimhan, PI Ziv Bar-Joseph [Activity Considered Community Engagement/Community-Engaged Scholarship?: Yes] [Approval for Pre-award Spending: No] [Internal/External: External] [Type of Funding: Federal] [Type of Grant: Research]

Research Cluster Grant, Funded by Silicon Mechanics (August 21, 2017), awarded April 10, 2017, Submitted - Not Funded, Spring 2017, PI Trevor Cickovski with CoPI Giri Narasimhan [Activity Considered Community Engagement/Community-Engaged Scholarship?: Yes] [Approval for Pre-award Spending: No] [Internal/External: External] [Type of Funding: Foundation] [Type of Grant: Equipment]

DaVIL, A Laboratory for Data Science, Funded by Florida International University (August 21, 2017 - August 21, 2019), awarded April 14, 2017 (**$241,223.00**), Submitted - Not Funded, Spring 2017, PI Giri Narasimhan with CoPI Trevor Cickovski, CoPI Monica Tremblay, PI Miguel Alonso, CoPI Changwon Yoo [Activity Considered Community Engagement/Community-Engaged Scholarship?: Yes] [Approval for Pre-award Spending: No] [Internal/External: Internal] [Type of Funding: University / College] [Type of Grant: Equipment]

Network-Based Multi-Omic Longitudinal Microbiome Analysis, Funded by National Science Foundation (August 1, 2017 - July 31, 2020), awarded November 16, 2016 (**$499,999.00**), Submitted - Not Funded, Fall 2016, PI Giri Narasimhan with CoPI Trevor Cickovski [Activity Considered Community Engagement/Community-Engaged Scholarship?: Yes] [Approval for Pre-award Spending: No] [Internal/External: External] [Type of Funding: Federal] [Type of Grant: Research]

A GPU-Based High Performance Cluster for Instructional and Research Purposes, Funded by Florida International University (August 1, 2016 - August 1, 2019), awarded April 15, 2016 (**$191,668.00**), Submitted - Not Funded, Spring 2016, PI Giri Narasimhan with CoPI Trevor Cickovski [Activity Considered Community Engagement/Community-Engaged Scholarship?: Yes] [Approval for Pre-award Spending: No] [Internal/External: Internal] [Type of Funding: Institutional] [Type of Grant: Equipment]

Research Cluster Grant, Funded by Silicon Mechanics (August 22, 2016), awarded April 4, 2016, Submitted - Not Funded, Spring 2016, PI Trevor Cickovski with CoPI Giri Narasimhan [Activity Considered Community Engagement/Community-Engaged Scholarship?: Yes] [Approval for Pre-award Spending: No] [Internal/External: External] [Type of Funding: Institutional] [Type of Grant: Equipment]

Next Generation Microbiome Analysis, Funded by National Science Foundation (July 1, 2016), awarded September 16, 2015 (**$927,426.00**), Submitted - Not Funded, Fall 2015, PI Giri Narasimhan with CoPI Jose Eirin-Lopez, CoPI Kalai Mathee-Narasimhan, CoPI Trevor Cickovski, CoPI Rajeev Azad [Activity Considered Community Engagement/Community-Engaged Scholarship?: No] [Approval for Pre-award Spending: No] [Internal/External: External] [Type of Funding: Federal] [Type of Grant: Research]

Social Networking Within Microbiomes, Funded by National Science Foundation (July 1, 2015 - June 30, 2019),

awarded November 10, 2014 (**$1,101,404.00**), Submitted - Not Funded, Fall 2014, PI Giri Narasimhan with CoPI Kalai Mathee-Narasimhan, CoPI Jose Eirin Lopez, CoPI Trevor Cickovski [Activity Considered Community Engagement/Community-Engaged Scholarship?: Yes] [Approval for Pre-award Spending: No] [Internal/External: External] [Type of Funding: Federal] [Type of Grant: Research]

Undergraduate Science Education, Funded by Howard Hughes Medical Institute (August 1, 2012), awarded October 3, 2011 (**$1,584,658.00**), Submitted - Not Funded, Fall 2011, PI Denise Flaherty with PI David Grove, CoPI Trevor Cickovski, CoPI Richard Schnabel, CoPI Yelda Hangun-Balkir, CoPI Gregory Gerdeman, CoPI Holger Mauch [Activity Considered Community Engagement/Community-Engaged Scholarship?: Yes] [Approval for Pre-award Spending: No] [Internal/External: External] [Type of Funding: Institutional] [Type of Grant: Program]

Submitted for Review

A Centralized, Community-Driven Infrastructure for Analysis Pipelines, Funded by National Science Foundation (August 1, 2022 - July 31, 2025) (**$1,397,320.00**), Submitted for Review, Spring 2022, PI Trevor Cickovski with CoPI Christine Lisetti, CoPI Ananda Mondal, CoPI Kalai Mathee, CoPI Giri Narasimhan, CoInvestigator Prem Chapagain [Activity Considered Community Engagement/Community-Engaged Scholarship?: Yes] [Approval for Pre-award Spending: No] [Internal/External: External] [Type of Funding: Federal] [Type of Grant: Research]

Flexible and Extensible Pipelines in the Cloud, Funded by Amazon Web Services (June 1, 2021 - October 1, 2021) (**$11,000.00**), Submitted for Review, Spring 2021, PI Trevor Cickovski [Activity Considered Community Engagement/Community-Engaged Scholarship?: No] [Approval for Pre-award Spending: No] [Internal/External: External] [Type of Funding: Corporate] [Type of Grant: Equipment]

Riding the Data Revolution using a micro-credentialing approach, Funded by National Science Foundation (August 1, 2021 - July 31, 2024) (**$1,500,000.00**), Submitted for Review, Spring 2021, CoPI Trevor Cickovski with CoPI Shaoming Cheng, CoPI Bridgette Cram, CoPI Michael Creeden, CoPI Mark Finlayson, CoPI Nazife Ganapati, CoPI Sukumar Ganapati, CoPI Kalai Mathee, CoPI Ananda Mondal, PI Giri Narasimhan, CoPI Gregory Reis, CoPI Sneh Gulati, CoPI Jennifer Fu, CoPI Jill Krefft, CoPI Jamie Rogers [Activity Considered Community Engagement/Community-Engaged Scholarship?: Yes] [Approval for Pre-award Spending: No] [Internal/External: External] [Type of Funding: Federal] [Type of Grant: Training]

Dynamic Bayesian Networks for Modeling Oral and Lung Microbiome, Funded by National Institute of Health (July 1, 2019), awarded October 4, 2019 (**$556,827.00**), Submitted for Review, Fall 2019, PI Giri Narasimhan with CoPI Trevor Cickovski, CoPI Kalai Mathee, PI Ziv Bar-Joseph, CoPI Namasivayam Ambalavanan [Activity Considered Community Engagement/Community-Engaged Scholarship?: Yes] [Approval for Pre-award Spending: No] [Internal/External: External] [Type of Funding: Government] [Type of Grant: Research]

In Preparation - Not Submitted

An Infrastructure for Community-Driven Microbiome Research, Funded by National Science Foundation (January 1, 2022) (**$1,500,000.00**), In Preparation - Not Submitted, Spring 2021, PI Trevor Cickovski with CoPI Giri Narasimhan, CoPI Kalai Mathee, CoPI Christine Lisetti, CoPI Richard Whittaker, CoPI Ananda Mondal [Activity Considered Community Engagement/Community-Engaged Scholarship?: Yes] [Approval for Pre-award Spending: No] [Internal/External: External] [Type of Funding: Federal] [Type of Grant: Research]

CyberMUM: Cyberinfrastructure for Monitoring Urban Microbiomes, Funded by National Institute of Health (July 1, 2020), awarded June 19, 2020 (**$50,000.00**), In Preparation - Not Submitted, Fall 2020, PI Kalai Mathee with CoPI Trevor Cickovski, CoPI Giri Narasimhan, CoPI Ananda Mondal, CoPI Sukumar Ganapati, CoPI Prem Chapagain, CoPI Jessica Liberles, CoPI David Brown, CoPI Raimundo Rodulfo, CoPI Rita Colwell, CoPI Manoj Dadlani [Activity Considered Community Engagement/Community-Engaged Scholarship?: Yes] [Approval for Pre-award Spending: No] [Internal/External: External] [Type of Funding: Federal] [Type of Grant: Research]

Professional Honors, Prizes, Fellowships

Fall 2001

Tau Beta Pi, 2001, Tau Beta Pi

Fall 2002

Arthur J. Schmitt Graduate Fellowship, 2002, University of Notre Dame

Spring 2004

Upsilon Pi Epsilon, 2004, Association for Computing Machinery (ACM)

Spring 2006

Kaneb Award For Excellence In Teaching, 2006, University of Notre Dame

Summer 2012

OpenMM Visiting Scholars Program, 2012, Stanford University

Spring 2014

Tenure and Promotion to Associate Professor, 2014, Eckerd College

Spring 2015

Hexennial Leave, 2015, Eckerd College

Fall 2017

Excellence In Teaching (SCIS), 2017, Florida International University

Spring 2019

Faculty Teaching Award (College of Engineering), 2019, Florida International University

Center for Advancement of Teaching (CAT) Fellow, 2019, Florida International University

Summer 2020

Graduate Faculty, 2020, Florida International University

Spring 2021

Professional Development Leave Approval (Fall 2021), 2021, Florida International University

Promotion to Associate Teaching Professor, 2021, Florida International University

Professional Licensure and Certification

Remote Teach Ready Badge, 2020, Florida, RTR1, Florida International University

University Committees

University

Fall 2018 - Summer 2020

Evaluating Teaching, (Office Of The Provost) [Activity Considered Community Engagement/Community-Engaged Scholarship?: Yes] [Level of Service: College/School]

Other Institutional Service

Fall 2020 - Summer 2021

Subject Area Coordinator (Computer Organization), (Computer Info Sciences)

Fall 2020 - Spring 2021

Undergraduate Program Committee (UPC) Chair, (Computer Info Sciences)

Evaluating Teaching Rubric, (Computer Info Sciences)

Summer 2020 - Summer 2020

Lead Judge (Posters), FSTAR Symposium, (Academic Health Center)

Fall 2018 - Spring 2019

Annual Awards Committee, (Computer Info Sciences)

Fall 2017 - Summer 2021

Instructor Hiring Committee (IHC), (Computer Info Sciences)

Fall 2016 - Spring 2020

UnderGraduate Program Committee (UGC), (Computer Info Sciences)

External Service

Fall 2021 - Fall 2021

AIMST University Summer Internship for Undergraduate Students, Academy for CS Education

Spring 2021 - Ongoing

Editorial Board, Microbiology Society

Spring 2021 - Spring 2021

Poster Judge, Microbiology Society

Fall 2020 - Spring 2021

Reviewer, Oxford University Press

Summer 2020 - Summer 2020

Reviewer, ACM

Spring 2019 - Summer 2019

Reviewer, Marquette University

Fall 2018 - Summer 2019

Reviewer, Springer

Spring 2018 - Spring 2018

Reviewer, Springer

Spring 2017 - Spring 2017

Reviewer, Wiley

Spring 2015 - Spring 2017

Reviewer, Wiley

Fall 2013 - Spring 2014

Graduate Fellowship Advisor, Eckerd College

Fall 2011 - Spring 2013

Admissions and Scholarships, Eckerd College

Fall 2011 - Spring 2012

Faculty Observer to the Board of Trustees, Eckerd College

Fall 2009 - Spring 2010

Africa Initiative, Eckerd College

Fall 2009 - Spring 2011

Computer Policy Group, Eckerd College

Student Supervision/Mentoring

Fall 2020 - Spring 2021

Student Name: Maheer Ahmed, Degree/Program: Computer Science, Student Type: Undergraduate Senior, Faculty Advisor Name: Trevor Cickovski, Affiliation (FIU or Other): FIU, Senior Project

Student Name: Rebecca Dupuis, Degree/Program: Computer Science, Student Type: Undergraduate Senior, Faculty Advisor Name: Trevor Cickovski, Affiliation (FIU or Other): FIU, Senior Project

Student Name: Javier Pena, Degree/Program: Computer Science, Student Type: Undergraduate Senior, Faculty Advisor Name: Trevor Cickovski, Affiliation (FIU or Other): FIU, Senior Project

Student Name: Anica Matos, Degree/Program: Computer Science, Student Type: Undergraduate Senior, Faculty Advisor Name: Trevor Cickovski, Affiliation (FIU or Other): FIU, Senior Project

Student Name: Edward Palermo, Degree/Program: Computer Science, Student Type: Undergraduate Senior, Faculty Advisor Name: Trevor Cickovski, Affiliation (FIU or Other): FIU, Senior Project

Student Name: Adriel Camargo, Degree/Program: Computer Science, Student Type: Undergraduate Senior, Faculty Advisor Name: Trevor Cickovski, Affiliation (FIU or Other): FIU, Senior Project

Student Name: Amanda Fernandez, Degree/Program: Computer Science, Student Type: Undergraduate Senior, Faculty Advisor Name: Trevor Cickovski, Affiliation (FIU or Other): FIU, Senior Project

Student Name: Reiner Gonzalez, Degree/Program: Computer Science, Student Type: Undergraduate Senior, Faculty Advisor Name: Trevor Cickovski, Affiliation (FIU or Other): FIU, Senior Project

Student Name: Christian Dau, Degree/Program: Computer Science, Student Type: Undergraduate Senior, Faculty Advisor Name: Trevor Cickovski, Affiliation (FIU or Other): FIU, Senior Project

Student Name: Karol Phung, Degree/Program: Computer Science, Student Type: Undergraduate Senior, Faculty Advisor Name: Trevor Cickovski, Affiliation (FIU or Other): FIU, Senior Project

Student Name: Caitlin Brown, Degree/Program: Computer Science, Student Type: Undergraduate Senior, Faculty Advisor Name: Trevor Cickovski, Affiliation (FIU or Other): FIU, Senior Project

Summer 2020 - Fall 2020

Student Name: Mariana Picans, Degree/Program: Computer Science, Faculty Advisor Name: Trevor Cickovski, Affiliation (FIU or Other): FIU, REU

Student Name: Nicholas Sanchez, Degree/Program: Computer Science, Student Type: Undergraduate, Student Status: Current, Faculty Advisor Name: Trevor Cickovski/Giri Narasimhan, Affiliation (FIU or Other): FIU, REU

Spring 2020 - Fall 2020

Student Name: Wendy Palacios, Degree/Program: Computer Science, Student Type: Undergraduate, Student Status: Current, Faculty Advisor Name: Trevor Cickovski/Giri Narasimhan, Affiliation (FIU or Other): FIU, REU

Fall 2019 - Summer 2020

Student Name: Roberto Hernandez, Degree/Program: Computer Science, Student Type: Undergraduate, Student Status: Current, Faculty Advisor Name: Trevor Cickovski/Giri Narasimhan, Affiliation (FIU or Other): FIU, REU

Fall 2019 - Spring 2020

Student Name: Darren Ellsworth, Degree/Program: Computer Science, Student Type: Undergraduate, Student Status: Current, Faculty Advisor Name: Trevor Cickovski/Giri Narasimhan, Affiliation (FIU or Other): FIU, REU

Student Name: Amanda Martinez, Degree/Program: Computer Science, Student Type: Undergraduate, Student Status: Current, Faculty Advisor Name: Trevor Cickovski/Giri Narasimhan, Affiliation (FIU or Other): FIU, REU

Student Name: Mark Fajet, Degree/Program: Computing and Information Sciences, Student Type: Masters, Student Status: Current, Faculty Advisor Name: Trevor Cickovski, Affiliation (FIU or Other): FIU, CIS 5900, Independent Study

Spring 2020 - Spring 2020

Student Name: Matthew Floyd, Degree/Program: Computer Science, Student Type: Undergraduate, Student Status: Current, Faculty Advisor Name: Trevor Cickovski/Giri Narasimhan, Affiliation (FIU or Other): FIU, REU

Spring 2019 - Summer 2019

Student Name: Cesia Bulnes, Degree/Program: Computer Science, Student Type: Undergraduate, Faculty Advisor Name: Trevor Cickovski, Affiliation (FIU or Other): FIU, Senior Project

Student Name: Bhavyta Chauhan, Degree/Program: Computer Science, Student Type: Undergraduate, Faculty Advisor Name: Trevor Cickovski, Affiliation (FIU or Other): FIU, Senior Project

Student Name: Veronica Parra, Degree/Program: Computer Science, Faculty Advisor Name: Trevor Cickovski, Affiliation (FIU or Other): FIU, REU

Student Name: Rishabh Vaidya, Degree/Program: Computer Science, Faculty Advisor Name: Trevor Cickovski, Affiliation (FIU or Other): FIU, Senior Project

Fall 2018 - Spring 2019

Student Name: Guillermo Barquero, Degree/Program: Computer Science, Student Type: Undergraduate, Faculty Advisor Name: Trevor Cickovski, Affiliation (FIU or Other): FIU, REU

Student Name: Alejandra Vasquez, Degree/Program: Computer Science, Student Type: Undergraduate, Faculty Advisor Name: Trevor Cickovski, Affiliation (FIU or Other): FIU, REU

Spring 2017 - Spring 2018

Student Name: Astrid Manuel, Degree/Program: Bioinformatics, Student Type: Undergraduate, Student Status: Graduated, Faculty Advisor Name: Trevor Cickovski/Giri Narasimhan, Affiliation (FIU or Other): FIU, REU

Spring 2016 - Spring 2017

Student Name: Cristina Alonso, Degree/Program: Computer Science, Student Type: Undergraduate, Student Status: Graduated, Faculty Advisor Name: Trevor Cickovski/Giri Narasimhan, Affiliation (FIU or Other): FIU, REU

Spring 2017 - Spring 2017

Student Name: Rob Panoff, Degree/Program: Computer Science, Student Type: Undergraduate, Student Status: Graduated, Faculty Advisor Name: Trevor Cickovski/Giri Narasimhan, Affiliation (FIU or Other): FIU, REU

Spring 2016 - Spring 2016

Student Name: RJ Nowling, Degree/Program: Computer Science and Engineering, Student Type: PhD, Student Status: Graduated, Title of project/thesis/dissertation (for graduated advisees only): Replacing Domain-Specific Methods in Bioinformatics with Machine Learning Techniques, Faculty Advisor Name: Scott Emrich/Jesus Izaguirre, Affiliation (FIU or Other): University of Notre Dame, Ph.D. Thesis Committee External Member

Summer 2015 - Summer 2015

Student Name: Eli Peake, Degree/Program: Computer Science, Student Type: Undergraduate, Student Status: Graduated, Title of project/thesis/dissertation (for graduated advisees only): ATria: A Novel Centrality Algorithm For Biological Networks, Faculty Advisor Name: Trevor Cickovski, Affiliation (FIU or Other): Eckerd College, REU

Student Name: Lawrence Irvin, Degree/Program: Computer Science, Faculty Advisor Name: Trevor Cickovski, Affiliation (FIU or Other): Eckerd College, REU

Student Name: Cameron Davis, Degree/Program: Computer Science, Student Type: Undergraduate, Student Status: Graduated, Title of project/thesis/dissertation (for graduated advisees only): Microbiome Analysis using signatures for undocumented Microbes (MiAMi), Faculty Advisor Name: Trevor Cickovski, Affiliation (FIU or Other): Eckerd College, REU

Fall 2014 - Spring 2015

Student Name: Galen Irving-Sachs, Degree/Program: Computer Science, Student Type: Undergraduate, Student Status: Graduated, Title of project/thesis/dissertation (for graduated advisees only): Moore's Law & Cryptographic Keys: A Case Study of Breaking RSA On The GPU, Faculty Advisor Name: Holger Mauch, Affiliation (FIU or Other): Eckerd College, Senior Thesis

Summer 2014 - Spring 2015

Student Name: Hugo Riggs, Degree/Program: Computer Science, Student Type: Undergraduate, Student Status: Graduated, Title of project/thesis/dissertation (for graduated advisees only): GPU Biofilm Image Processing, Faculty Advisor Name: Trevor Cickovski, Affiliation (FIU or Other): Eckerd College, REU

Fall 2014 - Fall 2014

Student Name: Kyle Kempton, Degree/Program: Computer Science, Student Type: Undergraduate, Student Status: Graduated, Title of project/thesis/dissertation (for graduated advisees only): GPU Biofilm Image Processing, Faculty Advisor Name: Trevor Cickovski, Affiliation (FIU or Other): Eckerd College, REU

Summer 2014 - Summer 2014

Student Name: Stephen Felman, Degree/Program: Computer Science, Student Type: Undergraduate, Student Status: Graduated, Title of project/thesis/dissertation (for graduated advisees only): Long Timestep Molecular Dynamics, Faculty Advisor Name: Trevor Cickovski, Affiliation (FIU or Other): Eckerd College, REU

Fall 2013 - Spring 2014

Student Name: Annie Rodgers, Degree/Program: Chemistry, Student Type: Undergraduate, Student Status: Graduated, Faculty Advisor Name: Trevor Cickovski, Affiliation (FIU or Other): Eckerd College, REU

Summer 2013 - Summer 2013

Student Name: Tiffany Flor, Degree/Program: Computer Science, Student Type: Undergraduate, Student Status: Graduated, Title of project/thesis/dissertation (for graduated advisees only): GPUDePiCt, A Software Framework for Constructing Degenerate Primers for Aligned DNA Sequences on the Graphics Processing Unit (GPU), Faculty Advisor Name: Trevor Cickovski, Affiliation (FIU or Other): Eckerd College, REU

Student Name: Galen Irving-Sachs, Degree/Program: Computer Science, Student Type: Undergraduate, Student Status: Graduated, Title of project/thesis/dissertation (for graduated advisees only): GPUDePiCt, A Software Framework for Constructing Degenerate Primers for Aligned DNA Sequences on the Graphics Processing Unit (GPU), Faculty Advisor Name: Trevor Cickovski, Affiliation (FIU or Other): Eckerd College, REU

Summer 2012 - Summer 2013

Student Name: Philip Novikov, Degree/Program: Computer Science, Student Type: Undergraduate, Student Status: Graduated, Title of project/thesis/dissertation (for graduated advisees only): GPUDePiCt, A Software Framework for Constructing Degenerate Primers for Aligned DNA Sequences on the Graphics Processing Unit (GPU), Faculty Advisor Name: Trevor Cickovski, Affiliation (FIU or Other): Eckerd College, REU

Summer 2012 - Summer 2012

Student Name: James Parda, Degree/Program: Computer Science, Student Type: Undergraduate, Student Status: Graduated, Title of project/thesis/dissertation (for graduated advisees only): GPUDePiCt, A Software Framework for Constructing Degenerate Primers for Aligned DNA Sequences on the Graphics Processing Unit (GPU), Faculty Advisor Name: Trevor Cickovski, Affiliation (FIU or Other): Eckerd College, REU

Fall 2010 - Spring 2012

Student Name: Austin Vance, Degree/Program: Computer Science, Student Type: Undergraduate, Student Status: Graduated, Title of project/thesis/dissertation (for graduated advisees only): Narwhal: An Interactive Classroom Tool Developed As A Case Study For The Software Technique Behavior-Driven Design (BDD), Faculty Advisor Name: Trevor Cickovski, Affiliation (FIU or Other): Eckerd College, Senior Thesis

Fall 2009 - Spring 2010

Student Name: RJ Nowling, Degree/Program: Computer Science, Student Type: Undergraduate, Student Status: Graduated, Title of project/thesis/dissertation (for graduated advisees only): Nature-inspired Metaheuristics for Combinatorial Optimization Problems, Faculty Advisor Name: Holger Mauch, Affiliation (FIU or Other): Eckerd College, Senior Thesis

Spring 2010 - Spring 2010

Student Name: Kristofer McEwing, Degree/Program: Computer Science, Student Type: Undergraduate Senior, Student Status: Graduated, Title of project/thesis/dissertation (for graduated advisees only): MDInter: A Molecular Dynamics Interface, Faculty Advisor Name: Trevor Cickovski, Affiliation (FIU or Other): Eckerd College, REU

Summer 2021 - Ongoing

Student Name: Mohsena Begum Remo, Degree/Program: Computer Science, Student Type: Masters, Student Status: Current, Faculty Advisor Name: Trevor Cickovski, Affiliation (FIU or Other): FIU, Graduate Advisor

Summer 2020 - Ongoing

Student Name: Fantaysia Polanco, Degree/Program: Pre-Med, Student Type: Undergraduate, Student Status: Current, Faculty Advisor Name: Trevor Cickovski/Kalai Mathee, Affiliation (FIU or Other): FIU, Summer Research

Student Name: Scot Connor, Degree/Program: Medicine, Student Type: MD, Student Status: Current, Faculty Advisor Name: Trevor Cickovski/Kalai Mathee, Affiliation (FIU or Other): FIU, Summer Research

Student Name: Patience Paul, Degree/Program: Medicine, Student Type: Masters, Student Status: Current, Faculty Advisor Name: Trevor Cickovski/Kalai Mathee, Affiliation (FIU or Other): FIU, Summer Research

Student Name: Eric Nayman, Degree/Program: Medicine, Student Type: MD, Student Status: Current, Faculty Advisor Name: Trevor Cickovski/Kalai Mathee, Affiliation (FIU or Other): FIU, Summer Research

Fall 2021 - Ongoing

Student Name: Vitalii Stebliankin, Degree/Program: Computer Science, Student Type: PhD, Student Status: Current, Title of project/thesis/dissertation (for graduated advisees only): Inferring Molecular Mimicry and Binding Affinities of Proteins with Deep Learning, Faculty Advisor Name: Giri Narasimhan, Affiliation (FIU or Other): FIU, Ph.D. defense committee

Spring 2020 - Ongoing

Student Name: Joseph Quinn, Degree/Program: Computer Science, Student Type: Undergraduate, Student Status: Current, Faculty Advisor Name: Trevor Cickovski, Affiliation (FIU or Other): FIU, REU

Spring 2018 - Ongoing

Student Name: Various Students, Degree/Program: CS/IT (Flit-Path), Student Type: Undergraduate, Student Status: Current, Faculty Advisor Name: Trevor Cickovski, Affiliation (FIU or Other): FIU, Flit-Path

Fall 2020 - Ongoing

Student Name: Zachary Schreiner, Degree/Program: Computer Science, Student Type: Undergraduate, Faculty Advisor Name: Trevor Cickovski, Affiliation (FIU or Other): FIU, REU

Spring 2021 - Ongoing

Student Name: Amy Fernandez Garcia , Degree/Program: Computer Science, Student Type: Undergraduate, Student Status: Current, Faculty Advisor Name: Trevor Cickovski, Affiliation (FIU or Other): FIU, REU

Student Name: Josue Prendes Diaz, Degree/Program: Computer Science, Student Type: Undergraduate, Student Status: Current, Faculty Advisor Name: Trevor Cickovski, Affiliation (FIU or Other): FIU, REU

Offices Held in Professional Societies

2007 - Ongoing

Institute of Electrical and Electronics Engineers

2007 - 2018

Association for Computing Machinery, 2018

American Association of University Professors, 2018

Consulting

Spring 2019 - Spring 2020

Cygned Inc., 175 hours

Professional Development

Fall 2021 - Fall 2021

Cybersecurity Awareness Trainng, Miami, Florida, 2 hours

Spring 2021 - Spring 2021

CITI Conflict of Interest Course, 2 hours

Summer 2020 - Summer 2020

Panthers Protecting Panthers: COVID-19 Safety, Miami, Florida, 2 hours

Spring 2020 - Spring 2020

Florida Atlantic University (FAU) Regional Learning Assistant (LA) Workshop, Boca Raton, Florida, 16 hours

Collaborative Institutional Training Initiative (CITI) Certifcation, Miami, Florida, 3 hours

Remote Learning with Learning Assistants (LAs) Workshop Series, Miami, Florida, 10 hours

NSF Proposal Writing Workshop, Miami, Florida, 10 hours

Spring 2019 - Spring 2019

Kognito's At-Risk for Faculty & Staff, Miami, Florida, 1 hours

Fall 2018 - Fall 2019

Strategies and Tactics for Recruitment to Increase Diversity and Excellence (STRIDE) Hiring/Faculty Recruitment Workshop, Miami, Florida, 3 hours

Spring 2018 - Ongoing

FIU-108 Access to Student Education Records (FERPA), Miami, Florida, 3 hours

Spring 2018 - Spring 2018

Personal Empowerment Series for Faculty, Miami, Florida, 6 hours

Spring 2017 - Spring 2017

ACM Special Interest Group on Computer Science Education 48th Technical Symposium (SIGCSE'17) , Seattle, Washington, 24 hours

Spring 2016 - Spring 2016

CAT Reading Group: "The Growth Mindset", Miami, Florida, 6 hours

Fall 2015 - Ongoing

Various Discipline-Based Education Research (DBER) Seminars, Miami, Florida, 10 hours

Engagement Activities

Spring 2020 - Spring 2020

Guest Lecturers/Presenters, Learning Assistant (LA) Workshop, Miami, Florida, USA, 2 hours, Cristy Charters, Trevor Cickovski and Debra Davis, Florida International University, Lead a workshop informing SCIS faculty about the process for hiring Learning Assistants and ideas for using them effectively in the classroom, Student learning, active learning, student engagement

Spring 2017 - Ongoing

Guest Lecturers/Presenters, Python Workshop, Miami, Florida, USA, 9 hours (3 x 3 hour sessions), Upsilon Pi Epsilon, Florida International University, Lead a workshop in the language Python, open to FIU students and the public, Community formation, sharing of knowledge

Courses Taught

Spring 2022

Semester	Course Prefix	Course Number	Section	Course Title	Overall Point Average	Response Rate	Total Population	Total Response
Spring 2022	CDA	3102	U01	Computer Architecture	0.00	0.00		
Spring 2022	CDA	3102	U02	Computer Architecture	0.00	0.00		
					0	0	0	0

Spring 2021

Semester	Course Prefix	Course Number	Section	Course Title	Overall Point Average	Response Rate	Total Population	Total Response
Spring 2021	CDA	3102	U01	Computer Architecture	4.41	.79	24	19
Spring 2021	CDA	3102	U02	Computer Architecture	4.73	.77	26	20
					9.14	1.56	50	39

Fall 2020

Semester	Course Prefix	Course Number	Section	Course Title	Overall Point Average	Response Rate	Total Population	Total Response
Fall 2020	CDA	3102	RVC	Computer Architecture	3.30	.51	49	25
Fall 2020	CDA	3102	U02	Computer Architecture	3.80	.50	46	23
Fall 2020	CDA	3102	UHA	Computer Architecture	4.02	.67	45	30
Fall 2020	CDA	4101	RVC	Structure Comp Org	4.29	.41	32	13

Fall 2020	COP	4604	RVC	Advanced Unix Prog	4.65	.53	19	10
					20.06	2.62	191	101

Spring 2020

Semester	Course Prefix	Course Number	Section	Course Title	Overall Point Average	Response Rate	Total Population	Total Response
Spring 2020	CDA	3102	U02	Computer Architecture	4.62	.68	22	15
Spring 2020	CDA	4101 *		Structure Comp Org	4.34	.70	50	35
					8.96	1.38	72	50

Fall 2019

Semester	Course Prefix	Course Number	Section	Course Title	Overall Point Average	Response Rate	Total Population	Total Response
Fall 2019	CDA	3103 *		Fund Computer System	4.78	.64	53	34
Fall 2019	CDA	4101 *		Structure Comp Org	4.72	.62	53	33
Fall 2019	CIS	5900	U27	Independent Study	0.00	0.00		
					9.5	1.26	106	67

Spring 2019

Semester	Course Prefix	Course Number	Section	Course Title	Overall Point Average	Response Rate	Total Population	Total Response
Spring 2019	CDA	3103 *		Fund Computer System	4.86	.68	37	25
Spring 2019	CDA	4101 *		Structure Comp Org	4.58	.67	39	26
					9.44	1.35	76	51

Fall 2018

Semester	Course Prefix	Course Number	Section	Course Title	Overall Point Average	Response Rate	Total Population	Total Response
Fall 2018	CDA	3103 *		Fund Computer System	4.75	.69	35	24
Fall 2018	CDA	4101 *		Structure Comp Org	4.82	.59	39	23
					9.57	1.28	74	47

Spring 2018

Semester	Course Prefix	Course Number	Section	Course Title	Overall Point Average	Response Rate	Total Population	Total Response
Spring 2018	CDA	3103 *		Fund Computer System	4.87	0.84	38	32
Spring 2018	CDA	4101 *		Structure Comp Org	4.88	0.92	38	35
					9.75	1.76	76	67

Fall 2017

Semester	Course Prefix	Course Number	Section	Course Title	Overall Point Average	Response Rate	Total Population	Total Response
Fall 2017	CDA	3103 *		Fund Computer System	4.49	.79	39	31
Fall 2017	CDA	4101 *		Structure Comp Org	4.32	.51	35	18
					8.81	1.3	74	49

Spring 2017

Semester	Course Prefix	Course Number	Section	Course Title	Overall Point Average	Response Rate	Total Population	Total Response
Spring 2017	CDA	3103 *		Fund Computer System	0.00	0.00		
Spring 2017	CDA	4101 *		Structure Comp Org	0.00	0.00		
					0	0	0	0

Fall 2016

Semester	Course Prefix	Course Number	Section	Course Title	Overall Point Average	Response Rate	Total Population	Total Response
Fall 2016	CDA	3103 *		Fund Computer System				
Fall 2016	CDA	4101 *		Structure Comp Org				

Spring 2016

Semester	Course Prefix	Course Number	Section	Course Title	Overall Point Average	Response Rate	Total Population	Total Response
Spring 2016	CDA	3103	U05	Fund Computer System				
Spring 2016	CDA	4101	U01	Structure Comp Org				

Fall 2015

Semester	Course Prefix	Course Number	Section	Course Title	Overall Point Average	Response Rate	Total Population	Total Response
Fall 2015	CDA	3103	U05	Fund Computer System				
Fall 2015	CDA	4101	U03	Structure Comp Org				