RUOGU FANG

J. Crayton Pruitt Family Department of Biomedical Engineering

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Research Interests

Big Data Analytics, Medical Image Analysis, Biomedical Informatics, Imaging Genetics, Brain Dynamics, Machine Learning, Data Mining, Computer Vision, Digital Image Processing and Visual Data Analytics.

Education

08/2009 - 08/2014 Cornell University

Ph.D. in Electrical and Computer Engineering, Minor in Computer Science

Advisor: Tsuhan Chen, David E. Burr Professor of Engineering and Director of ECE, IEEE Fellow

Dissertation Committee Member: Ramin Zabih, Noah Snavely, Pina C. Sanelli

02/2009 - 05/2009 The University of Cambridge

Visiting Research Student in Chemical Engineering and Biotechnology

Advisor: Christopher Lowe

08/2007 - 06/2008 The University of Hong Kong (HKU)

Exchange in Electrical and Electronic Engineering

Advisor: Kenneth K.Y. Wong

09/2005 - 06/2009 **Zhejiang University**, China

B.Eng. in Information Engineering, Ranking: 1/141 in Chu-Kochen Honors College

Advisor: Prof. Lu Yu

Professional Experience

08/2017-present, Tenure-Track Assistant Professor

J. Crayton Pruitt Family Department of Biomedical Engineering

Herbert Wertheim College of Engineering

University of Florida;

08/2014-08/2017, Tenure-Track Assistant Professor

School of Computing and Information Sciences

College of Engineering and Computing

Florida International University;

Grants

Single PI, IIS-1564892 CRII: SCH: Characterizing, Modeling and Evaluating Brain Dynamics, National Science Foundation + REU Supplement, \$190,991, 2016-2018. (Pre-CAREER Award)

Single PI, Modeling, Estimating and Reasoning in Limited Data Brain Dynamics, Ralph Lowe Junior Faculty Enhancement Award, Oak Ridge Associated Universities (ORAU), \$10,000, 2016-2017.

Co-PI, Seed Grant, Quantitative Differentiation Of Healing And Non-Healing Diabetic Ulcers Using Near-Infrared Optical Imaging, Florida International University, Department of Biomedical Engineering, \$5,552, 2016-2017.

PI, Startup Grant, Florida International University, College of Engineering and Computing, \$483,587, 2014-2016.

Co-PI, CTSC: Minimal Radiation Exposure Technology For Acute Stroke Assessment In CT Perfusion Using Sparse Deconvolution And Dictionary Learning, National Institute of Health, \$100,000, 2015-2017.

Key Personnel - Advanced Cyber Analytics, DoD-W900KK-16-C-0043 CTAM: Cyber Attack Orchestration Test Bed for Automation and Threat Monitoring in Virtual Environment, Department of Defense, \$1,500,000, 2016-2017.

Senior Personnel, REU SITE: ASSET: Research Experiences for Undergraduates in Advanced Secured Sensor Enabling Technologies, Florida International University, PI: Niki Pissinou, National Science Foundation, \$360,000, 2016-2019.

Senior Personnel, REU SITE: ASSET: Research Experiences for Undergraduates in Advanced Secured Sensor Enabling Technologies, Florida International University, PI: Niki Pissinou, National Science Foundation, \$360,000, 2013-2016.

Senior Personnel, RET in Engineering and Computer Science SITE: Research Experience for Teachers on Cyber-Enabled Technologies, National Science Foundation, PI: Niki Pissinou, National Science Foundation, \$498,000, 2014-2017.

Investigator, Cornell University-Ithaca and Weill Cornell Medical College Faculty Seed Grant for Collaborations Between: Learning-Based Low Radiation CT Perfusion for Acute Stroke Diagnosis, PI: Ajay Gupta, Tsuhan Chen, Cornell University, \$50,000, 2014-2015

Key Personnel, NINDS K23: Improving Clinical Outcomes in Aneurysmal Subarachnoid Hemorrhage Using CT Perfusion, PI: Pina C. Sanelli, \$857,520, National Institute of Health, 2008 2013

Key Personnel, NIH NINDS: To Achieve Reliable Image Reconstruction From Sparse (Low-Dose) CT Perfusion Acquisitions, PI: Pina C. Sanelli, National Institute of Health, \$54,000, 2010-2011

Honors and Awards

- Inaugural Class of the ACM Future of Computing Academy (FCA) (46 members selected worldwide and invited to attend ACM's celebration of 50 years of the ACM Turing Award), 2017
- Ralph Lowe Junior Faculty Enhancement Award, Oak Ridge Associated Universities (1 of 35 awardees nationwide in the United States), 2016
- \bullet Robin Sidhu Memorial Young Scientist Award, Society of Brain Mapping and Therapeutics (first recipient of this award), 2016

- National Science Foundation CISE Research Initiation Initiative (CRII) Award, 2015
- National Science Foundation CISE CAREER Workshop Travel Award, 2015
- Hsien Wu and Daisy Yen Wu Memorial Award (awarded to 5 outstanding graduate students at Cornell University), 2014
- Hottest Article in Medical Image Analysis, Elsevier Publisher, April-September, 2014
- Best Paper Award, the 17th International Conference on Image Processing (Top 1 out of 1190 accepted papers, first author publication) 2010
- Irwin and Joan Jacobs Fellowship, Cornell University, 2009-2010
- Best PhD Poster Award, Cornell Engineering Research Conference, 2010
- Student Travel Award, International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI), 2014
- Student Travel Award, the 17th International Conference on Image Processing, 2010
- IBM Cornell ECE Womens Conference Travel Grant, the 15th International Conference on Medical Image Computing and Computer Assisted Intervention, 2012
- Bao-Steel Scholarship, P.R. China, 2008
- Li & Fung Scholarship, University of Hong Kong (full stipend and tuition for exchange students), 2007-2008.
- First Class Scholarship, Zhejiang University, 2006-2009
- Deans List (top 1%), Zhejiang University, 2006-2009
- First Prize in the National Olympiad in Mathematics, 2001

Refereed Journal Publications

Highlight: 8 first author journal papers, 2 in MedIA, 1 in IEEE TMI, 1 in ACM CSUR.

Authors with * are my (co-)supervised students

- 1. [PR'17] Zhongyu Li, <u>Ruogu Fang</u>, Fumin Shen, Shaoting Zhang: Indexing and Mining Large-Scale Neuron Databases using Maximum Inner Product Search, in *Pattern Recognition*, accepted.
- 2. [NC'17] Fei Jiang*, Huating Li, Xuhong Hou, Bin Sheng, Ruimin Shen, Xiao-Yang Liu, Weiping Jia, Ping Li, <u>Ruogu Fang</u>: Abdominal Adipose Tissues Extraction Using Multi-Scale Deep Neural Network, in *NeuroComputing*, in press (corresponding author).
- 3. [NC'17] Ruogu Fang, Ajay Gupta, Junzhou Huang, Pina Sanelli: TENDER: TEnsor Non-local Deconvolution Enabled Radiation Reduction in CT Perfusion, in *NeuroComputing*, in press. (corresponding author) (corresponding author)
- 4. [CSUR'16] Ruogu Fang, Samira Pouyanfar*, Yimin Yang, Shu-Ching Chen, and S. S. Iyengar: Computational Health Informatics in the Big Data Age: A Survey, in *ACM Computing Survey*, 49(1), p.12, 2016. (5-Year Impact Factor: 4.66, highest impact factor in ISI Journal Citation Reports) (corresponding author)

- 5. [MCV'16] Ruogu Fang, Ming Ni*, Junzhou Huang, Qianmu Li, Tao Li: Efficient 4D Non-Local Tensor Total-Variation for Low-Dose CT Perfusion Deconvolution, in *Medical Computer Vision:*Algorithms for Big Data, 9601, pp. 168-179, Lecture Notes in Computer Science, 2016. (corresponding author)
- 6. [TMI'15] Ruogu Fang, Shaoting Zhang, Tsuhan Chen, Pina C. Sanelli: Robust Low-dose CT Perfusion Deconvolution via Tensor Total-Variation Regularization, in *IEEE Transaction on Medical Imaging*, 34(7), p.1533-1548, 2015. (corresponding author)
- [CMIG'15] Ruogu Fang, Tsuhan Chen, Dimitris Metaxas, Pina Sanelli, Shaoting Zhang.: Guest Editorial: Sparsity Techniques in Medical Imaging, in Computerized Medical Imaging and Graphics, 46(1), 2015.
- 8. [CMIG'15] Ruogu Fang, Haodi Jiang*, Junzhou Huang: Tissue-Specific Sparse Deconvolution for Brain CT Perfusion, in Computerized Medical Imaging and Graphics, 46(1), p. 64-72, 2015. (corresponding author)
- 9. [MedIA'14] Ruogu Fang, Kolbeinn Karlsson*, Tsuhan Chen, Pina C. Sanelli: Improving Low-Dose Blood-Brain Barrier Permeability Quantification Using Sparse High-Dose Induced Prior for Patlak Model, in *Medical Image Analysis*, 18(6), pp. 866-880, 2014. (corresponding author)
- 10. [MedIA'13] Ruogu Fang, Tsuhan Chen, Pina C. Sanelli: Towards Robust Deconvolution of Low-Dose Perfusion CT: Sparse Perfusion Deconvolution Using Online Dictionary Learning, in Medical Image Analysis, 17(4), pp. 417-428, 2013 (5 Year Impact Factor: 4.512, Top 25 Hottest Articles in Medical Image Analysis in 2013 April-June, corresponding author).

Refereed Conference and Workshop Publications

Highlight: 17 first author papers and 5 senior author papers, 8 in MICCAI (leading conference in Medical Image Analysis), 1 Best Paper Award, 1 Travel Award, 1 NSF REU Best Poster Award Authors with * are my (co-)supervised students

- [MICCAI'17] Ling Dai*, Qiang Wu, Bin Sheng, <u>Ruogu Fang</u>: Retinal Microaneurysm Detection Using Clinical Report Guided Multi-Sieving Convolutional Neural Network, in Medical Image Analysis and Computer Assisted Intervention, September, 2017, Quebec, Canada. (corresponding author)
- [CHASE'17]) Yao Xiao*, <u>Ruogu Fang</u>: RFMiner: Risk Factors Discovery and Mining for Preventive Cardiovascular Health, in the Second IEEE/ACM Conference on Connected Health: Applications, Systems and Engineering Technologies, July, 2017, Philadelphia, USA. (corresponding author)
- 3. [NIPS WiML'16] Maryamossadat Aghili*, Ruogu Fang: Towards High-Throughput Abnormal Brain Screening in MRI Images, in Women in Machine Learning Workshop, Neural Information Processing Systems (NIPS), December 2016, Barcelona, Spain.
- 4. [BMES'16b] Paul Naghshineh*, Peng Liu*, <u>Ruogu Fang</u>: CT Perfusion Image Super-Resolution Using a Deep Convolutional Network, in *Biomedical Engineering Society Annual Meeting (BMES)*, October 5-8, 2016 in Minneapolis, Minnesota. (NSF-REU Best Post Award, SCIS FIU, corresponding author)
- 5. [BMES'16a] Anuradha Godavarty, Rebecca Kwasinki, Cristianne Fernandez, Yuanyuan Zhu*, Edwin Robledo, F. Perez-Clavijo, <u>Ruogu Fang</u>: Physiological Assessment of Wound Healing using a Near-Infrared Optical Scanner, in *Biomedical Engineering Society Annual Meeting (BMES)*, October 5-8, 2016 in Minneapolis, Minnesota.

- 6. [ISBI'16c] Ruogu Fang, Xing Pang*, Arash Dadkhah, Jiali Lei, Elizabeth Solis, Suset Rodriguesz, Francisco Perez-Clavijo, Stephen Wigley, Charles Buscemi, Anuradha Godvarty: Automatic Segmentation of Lower Extremity Ulcers in Near-Infrared Optical Imaging, in *IEEE International Symposium on Biomedical Imaging* (ISBI), Prague, Czech Republic, April, 2016. (corresponding author)
- 7. [ISBI'16b] Zhongyu Li, Fumin Shen, Ruogu Fang, Sailesh Conjeti, Amin Katouzian, Shaoting Zhang: Maximum Inner Product Search for Morphological Retrieval of Large-Scale Neuron Data, in *IEEE International Symposium on Biomedical Imaging (ISBI)*, Prague, Czech Republic, April, 2016. (Oral Presentation Rate: 19%)
- 8. [ISBI'16a] Ruogu Fang, Ajay Gupta, Pina C. Sanelli: Direct Estimation of Permeability Maps for Low-Dose CT Perfusion, in *IEEE International Symposium on Biomedical Imaging (ISBI)*, Prague, Czech Republic, April, 2016. (corresponding author)
- 9. [OSA'16] Xing Pang*, Arash Dadkhah, Jaili Lei, Elizabeth Solis, Suset Rodriguez, Francisco Perez-Clavijo, Stephen Wigley, <u>Ruogu Fang</u>, Anuradha Godvarty: Near-Infrared Optical Imaging and Wound Segmentation in Lower Extremity Ulcers, in *Optical Society of America Annual Meeting* (OSA), 2016.
- 10. [SPIE'16] Arash Dadkhah, Xing Pang*, Elizabeth Solis, Ruogu Fang, Anuradha Godvarty: Wound Size Measurement of Lower Extremity Ulcers Using Segmentation Algorithms, in SPIE Proceedings in Photonics West, San Francisco, February 2016.
- 11. [WI'16] Ruogu Fang, Xing Pang*, Arash Dadkhah, Jiali Lei, Elizabeth Solis, Suset ROdriguez, Francisco Perez-Calvijo, Stephen Wigley, Charles Buscemi, Anuradha Godvarty: Wound Segmentation in Near-Infrared Optical Imaging, in *Innovation in Wound Healing*, Hawks Cay, FL. 2015.
- 12. [MICCAI'15] Ruoyu Li, Yeqing Li, Ruogu Fang, Shaoting Zhang, Junzhou Huang: Fast Preconditioning for Accelerated Multi-Contrast MRI Reconstruction, in *The 18th Annual International Conference on Medical Image Computing and Computer Assisted Intervention*, Munich, Germany, Oct. 5-9, 2015. (Oral Presentation Rate: 4%)
- 13. [MICCAI-MCV'15] Ruogu Fang, Ming Ni, Junzhou Huang, Qianmu Li, Tao Li: Efficient 4D Non-Local Tensor Total-Variation for Low-Dose CT Perfusion Deconvolution, The 18th Annual International Conference on Medical Image Computing and Computer Assisted Intervention, Workshop on Medical Computer Vision, Munich, Germany, October 2015. (corresponding author)
- 14. [BMES'15] Ruogu Fang, Ming Ni, Junzhou Huang, Qianmu Li, Tao Li: Robust Low-Dose CT Perfusion Deconvolution via Non-Local Tensor Total Variation, in *Biomedical Engineering Society Annual Meeting*, Tampa, FL, October 2015. (corresponding author)
- 15. [ISMRM'15] Ruogu Fang: 4-D Spatio-Temporal MR Perfusion Deconvolution via Tensor Total Variation, in *International Society for Magnetic Resonance in Medicine Annual Meeting* 2015 (Oral presentation, corresponding author).
- 16. [ISBI'15b] Menglin Jiang, Shaoting Zhang, Ruogu Fang, Dimitris Metaxas: Leveraging Inverted Multi-Index for Scalable Retrieval of Mammographic Masses, in *IEEE International Symposium Onbiomedical Imaging: From Nano To Macro*, New York, NY April, 2015. Oral Presentation Rate: 18%
- 17. [ISBI'15a] Ruogu Fang, Junzhou Huang, Wen-Ming Luh: A Spatio-Temporal Low-Rank Total Variation Approach For Denoising Arterial Spin Labeling MRI Data, in *IEEE International Symposium Onbiomedical Imaging: From Nano To Macro*, New York, NY April, 2015.(corresponding author)

- 18. [MICCAI'14] Ruogu Fang, Pina Sanelli, Shaoting Zhang, Tsuhan Chen: Tensor Total-Variation Regularized Deconvolution for Efficient Low-Dose CT Perfusion, in *The 17th Annual International Conference on Medical Image Computing and Computer Assisted Intervention*, Boston, MA. September 2014 (MICCAI Student Travel Award, corresponding author)
- 19. [MICCAI-STMI'14] Ruogu Fang, Tsuhan Chen, Pina C. Sanelli: Anisotropic Tensor Total Variation Regularization For Low Dose Low CT Perfusion Deconvolution, in *The 17th Annual International Conference on Medical Image Computing and Computer Assisted Intervention, Workshop on Sparsity Techniques in Medical Imaging*, Boston, MA. September 2014. (corresponding author)
- 20. [MICCAI'13] Ruogu Fang, Tsuhan Chen, Pina Sanelli: Tissue-Specific Sparse Deconvolution for Low-Dose CT Perfusion, in *The 16th Annual International Conference on Medical Image Computing and Computer Assisted Intervention*, Japan, 2013. (corresponding author)
- 21. [ICIP'13] Ruogu Fang, Andrew C. Gallagher, Tsuhan Chen, Alexander Loui: Kinship Classification by Modeling Facial Feature Heredity, in *IEEE International Conference on Image Processing*, Melbourne, Australia, 2013 (Oral presentation)
- 22. [MICCAI'12] Ruogu Fang, Tsuhan Chen, Pina Sanelli: Sparsity-Based Deconvolution of Low-Dose Perfusion CT Using Learned Dictionaries, in *The 15th Annual International Conference on Medical Image Computing and Computer Assisted Intervention*, Nice, France, Lecture Notes in Computer Science Volume 7510, pp. 272-280, 2012. (corresponding author)
- 23. [ISBI'12] Ruogu Fang, Tsuhan Chen, Pina Sanelli: Sparsity-Based Deconvolution Of Low-Dose Brain Perfusion CT In Subarachnoid Hemorrhage Patients, in *The 9th IEEE International Symposium on Biomedical Imaging*, pp. 872-875, 2012 (Oral Presentation Rate: 18%, corresponding author)
- 24. [SPIE'12] Ruogu Fang, Ashish Raj, Tsuhan Chen, Pina C. Sanelli: Radiation dose reduction in computed tomography perfusion using spatial-temporal Bayesian methods, in *Proceedings of SPIE Medical Imaging*, Volume 8313, Paper 831345, 2012. (corresponding author)
- 25. [MICCAI-AI'11] Ruogu Fang, Ramin Zabih, Ashish Raj, Tsuhan Chen: Segmentation of Liver Tumor Using Efficient Global Optimal Tree Metrics Graph Cuts, in *Abdominal Imaging, International Conference on Medical Image Computing and Computer Assisted Intervention*, pp. 51-59, 2011 (Oral presentation, corresponding author)
- 26. [ICIP'10] Ruogu Fang, Kevin D. Tang, Noah Snavely, Tsuhan Chen: Towards Computational Models of Kinship Verification, in *The 17th IEEE International Conference on Image Processing*, Hong Kong, 2010 (Oral presentation, **Best Paper Award**, 1/1190 accepted papers).
- 27. [WNYIPW'10] Ruogu Fang, Joyce Yu-hsin Chen, Ramin Zabih, Tsuhan Chen: Tree-Metrics Graph Cuts For Brain MRI Segmentation With Tree Cutting, in *IEEE Western New York Image Processing Workshop*, pp. 10-13, 2010 (Oral presentation).
- 28. [VISAPP'09] Chongyang Liu, Ruogu Fang, Nelson H.C.Yung: Adaptive Scale Robust Feature Density Approximation For Visual Object Representation And Tracking, in *IEEE International Conference on Computer Vision Theory and Applications*, Lisboa, Portugal, 2009.

Patent

Ruogu Fang, Leo Grady, Gianluca Paladini: System and Method For Interactive Segmentation On Mobile Devices in a Cloud Computing Environment, Siemens Corporation, U.S. Patent No: US20130272587 A1, WO2012027259 A2, WO2012027259 A3, approved on 4/19/2012.

Talks & Presentations

1. Big Medical Data in Brain Imaging

Department of Biomedical Engineering, University of Florida, FL. 2017;

Department of Computer Science, Florida State University, FL. 2017;

Department of Bioengineering & Electrical and Computer Engineering, University of California at Riverside, CA. 2017;

Math and Statistics, FIU, FL. 2016;

Department of Biological Sciences, FIU, FL. 2016;

- 2. Big Medical Data: Brain Vision and Wound, at Zhejiang University, China, 2016
- 3. Exploiting Big Medical Data in Brain Imaging, at South Medical University, China, 2016
- 4. Robust Low-Dose CT Perfusion Deconvolution via Non-Local Tensor Total Variation, at Biomedical Engineering Society Annual Meeting, Tampa, FL, 2015;
- Structure Learning-Based Big Medical Image Analytics, at International Young Researcher Medicine and Health Forum, China, 2016.
- 6. Big Medical Data: Challenges, Opportunities and Advances, BME Wallace H. Coulter Foundation Lecture Series, in Biomedical Engineering, Florida International University, 2015;
- 7. 4-D Spatio-Temporal MR Perfusion Deconvolution via Tensor Total Variation, at International Society for Magnetic Resonance in Medicine (ISMRM) Annual Meeting, Toronto, Canada, 2015;
- 8. Exploiting the Medical Data Structure for Biomedical Imaging Enhancement

School of Astronautics at BeiHang University (BUAA), Beijing, China, 2015;

New Century Seminars, Shandong Normal University, Jinan, Shandong. 2015;

School of Information Science and Technology, ShanghaiTech, Shanghai, China, 2015;

College of Engineering and Computing, Florida International University, 2014;

School of Computing and Information Sciences, Florida International University, 2014

- 9. Robust Medical Image Analysis In Assessing Disease Progression and Treatment Response, at International Conference on Computational Advances in Bio and Medical Sciences (ICCABS), Miami, FL, 2014
- 10. Towards Safer Medical Imaging: Sparsity-based Perfusion Deconvolution, at Weill Cornell Medical College, NY, 2014;
- 11. Towards Robust Medical Imaging

Indiana University, IN, 2014;

Florida International University, FL, 2014;

- 12. Learning-based Low-Dose Medical Imaging Enhancement, at Shanghai Jiao Tong University, 2014;
- 13. Sparse Deconvolution

Shanghai Jiao Tong University, 2014;

College of Information Science, Zhejiang University, 2014;

College of Biomedical Engineering Instrument Science, Zhejiang University, 2014;

- 14. Kinship Classification by Modeling Facial Feature Heredity, at the International Conference on Image Processing, Melbourne, Australia, 2013;
- 15. Learning-based Low-Dose Medical Imaging Enhancement, at Xiamen University, China, 2013;
- 16. Sparsity-Based Deconvolution Of Low-Dose Brain Perfusion CT

The International Symposium on Biomedical Imaging, San Francisco, CA, US International Symposium on Biomedical Imaging, Barcelona, Spain, 2012;

- 17. Segmentation of Liver Tumor Using Efficient Global Optimal Tree Metrics Graph Cuts, at International Conference on Medical Image Computing and Computer Assisted Intervention, 2011;
- 18. Towards Computational Models of Kinship Verification

The International Conference on Image Processing, Hong Kong, 2010; Carnegie Mellon University, Pittsburgh, PA, 2010.

Professional Activities

Journal Editorship:

Guest Editor, Computerized Medical Imaging and Graphics, Elsevier

Chair:

Co-Chair: STMI (with MICCAI'14)

Program Committee Publicity Chair: IEEE ICMLA 2015

Session Chair: SBMT 2017

Panelist:

National Science Foundation, Smart and Connected Health, 2015 National Science Foundation, Smart and Connected Health, 2016 National Institute of Health, Bio-Data Management and Analysis Study Section, 2016

Program Committee Member or Reviewer:

Books: Wiley Publisher; Elsevier Publisher;

Journals: IEEE Transaction on Pattern Analysis and Artificial Intelligence (IF:6.077); Medical Image Analysis (IF: 4.5); IEEE Transactions on Medical Imaging (IF: 4.3); IEEE Transaction on Image Processing (IF: 3.735); ACM Computing Survey (IF: 3.7); IEEE Transaction on Circuits and Systems for Video Technology (IF: 2.615) Neuroradiology (IF: 2.4); Neurocomputing Computerized Methods and Programs in Biomedicine (IF: 1.964) IEEE Transac-(IF: 2.005);tion on Multimedia (IF: 1.776); IEEE Transaction on Instrumentation Measurement (IF: 1.7); Signal Processing Letter (IF=1.6); Journal Electronic Imaging (IF: 1.601); IEEE Signal Pro-IBM Journal of Research and Development; Cancer Informatics: cessing Letter: Vision and Applications (IF: 1.103), X-Ray Science and Technology (IF: 1.111); IET Imaging Processing: Computational Intelligence and Neuroscience

Conferences: MICCAI (2014, 2015, 2016), MICCAI-MCV (2015, 2016), IEEE CVPR (2013), IEEE ICCV (2013), IEEE ICIP (2010, 2011, 2012, 2013), IEEE ISBI (2014, 2015).

News Coverage

ACM Future of Computing Academy, 2017.

ACM TechNews, 2016.

Healthcare Business, 2016.

FIU News: Professor uses computer science to reduce patients exposure to radiation from CT scans, 2016.

NewScientist: Facial recognition software spots family resemblance, 2012.

Cambridge News: University of Cambridge Official News: Students from 'Cambridge of the East' take part in exchange, 2009.

Courses Taught

Graduate level, CAP 5610: Machine Learning, Florida International University, Spring 2014, Spring 2015, Spring 2016 (Average Student Evaluation Score: **4.46/5.00**);

Undergraduate level, CAP 4770: Introduction to Data Mining, Florida International University, Fall 2015, Fall 2016 (Average Student Evaluation Score: **4.74/5.00**);

Student Advising

Peng Liu: PhD student at Florida International University, 2015-.

Yao Xiao: PhD student at Florida International University, 2016-.

Maryam Aghili: PhD student at Florida International University, 2015-.

Micheal Adeyosoye: MSc student at Florida International University, 2016-, Bridge to PhD Fellowship.

Paul Naghshineh: REU student from George Washington University, 2016 summer, Best REU Poster Award at REU Symposium, SCIS of FIU.

Christian McDonald: RET teacher from Miami Jackson Senior High School, 2016 summer, Best RET Poster Award at RET Symposium, SCIS of FIU.

Edda Rivera: RET teacher from John A. Ferguson Senior High School, 2016 summer, Best RET Poster Award at RET Symposium, SCIS of FIU.

Jingan Qu: MSc student at Florida International University, 2015-.

Daniel Parra: MSc student at Florida International University, 2015-2016.

Yuan Yuan Zhu: Visiting undergraduate student from Zhejiang University, 2016.

Xing Pang: Visiting graduate student from Nanjing University of Science Technology, 2015-2016,

Haodi Jiang: MSc student at Florida International University, 2014-2015, now PhD student at New Jersey Institute of Technology.

Fei Jiang: PhD student at Shanghai Jiaotong University (co-advised), 2015-

Ling Dai: PhD student at Shanghai Jiaotong University (co-advised), 2015-

Sherman Ng: MEng student at Cornell University, 2010-2011, B.S. from Berkeley.

PhD Dissertation Committee

Jared Leichner (Major adviser: Wei-Chang Lin): Heterogeneity of Network Connectivity of Brain

Tissue Application on Epilepsy

Mohammad S. Islam (Major advisor: Deng Hai): Neuro-adaptive system for human

Camilo Valdes (Major advisor: Giri Narasimhan): Large Scale Human Microbiome Analytics

Mizanur Rahman (Major advisor: Bogdan Carbunar)

Mozhgan Azimpourkivi (Major advisor: Bogdan Carbunar)

Sudarat Tangnimitchok (Major advisor:Armando Barreto): Non-Intrusive Affective Assessment in the Circumplex Model from Pupil Diameter and Facial Expression Monitoring

Master Thesis Committee

Franklin Abodo (Major advisor: Leonardo Bobadilla)

References

Tsuhan Chen (PhD advisor at Cornell University)
David E. Burr Professor of Engineering
School of Electrical and Computer Engineering
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Cheng Tsang Man Chair Professor
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Pina C. Sanelli (Clinical Mentor and Collaborator)
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Vice Chairman of Research
Department of Radiology
Northwell Health
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James Duncan
Ebenezer K. Hunt Professor
Biomedical Engineering, Electrical Engineering & Radiology and Biomedical Imaging
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