

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.

Co-I, DHS Scientific Leadership Awards for Minority Serving Institutions Granting Bachelor Degrees, Department of Homeland Security (DHS), \$1,200,000, DHS-16-ST-062-001, PI: Jason Liu, 2017-2020.

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
 - 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
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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. [IET'17] Saleha Masood*, Bin Sheng, Ping Li, Ruimin Shen, Ruogu Fang, Qiang Wu: Automatic Choroid Layer Segmentation: A Slicing Approach, in *IET Image Processing*, pp. 22, DOI: 10.1049/iet-ipr.2017.0273, Online ISSN 1751-9667, 2017.
2. [PR'17] Zhongyu Li, Ruogu Fang, Fumin Shen, Shaoting Zhang: Indexing and Mining Large-Scale Neuron Databases using Maximum Inner Product Search, in *Pattern Recognition*, vol. 63, pp. 680-688, 2017.
3. [NC'17] Fei Jiang*, Huating Li, Xuhong Hou, Bin Sheng, Ruimin Shen, Xiao-Yang Liu, Weiping Jia, Ping Li, Ruogu Fang: Abdominal Adipose Tissues Extraction Using Multi-Scale Deep Neural Network, in *NeuroComputing*, vol. 229, pp. 23-33, 2017 (corresponding author).

4. [NC'17] Ruogu Fang, Ajay Gupta, Junzhou Huang, Pina Sanelli: TENDER: TENSOR Non-local Deconvolution Enabled Radiation Reduction in CT Perfusion, in *NeuroComputing*, vol. 229, pp. 13-22, 2017. (corresponding author)
5. [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)
6. [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)
7. [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)
8. [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.
9. [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)
10. [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)
11. [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 10 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

1. [MICCAI'17] Ling Dai*, Qiang Wu, Bin Sheng, Ruogu Fang: 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)
2. [MICCAI'17] Yao Xiao*, Ruogu Fang: STAR: Spatio-Temporal Architecture for super-Resolution in Low-Dose CT Perfusion, in *Medical Image Analysis and Computer Assisted Intervention, Machine Learning in Medical Imaging Workshop*, September, 2017, Quebec, Canada. (**MICCAI Student Travel Award, 50/810=6% award rate**, corresponding author)
3. [BMES'17] Yao Xiao*, Ruogu Fang: Cardiovascular Disease Prediction and Risk Factor Mining with RFMiner, in *Biomedical Engineering Society Annual Meeting (BMES) Annual Meeting*, October 11-14, 2017, Phoenix, Arizona. (corresponding author)

4. [BMES'17] Yao Xiao*, Ruogu Fang: Accelerated Brain Perfusion Imaging via Spatio-Temporal Super-Resolution, in *Biomedical Engineering Society Annual Meeting (BMES) Annual Meeting*, October 11-14, 2017, Phoenix, Arizona. (corresponding author)
5. [BMES'17] Peng Liu*, Ruogu Fang: A Simple and Realistic Simulation Method for Low-Dose CT., in *Biomedical Engineering Society Annual Meeting (BMES) Annual Meeting*, October 11-14, 2017, Phoenix, Arizona. (corresponding author)
6. [CHASE'17] Yao Xiao*, Ruogu Fang: 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. (**NSF Student Travel Award**, corresponding author)
7. [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.
8. [BMES'16b] Paul Naghshineh*, Peng Liu*, Ruogu Fang: 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)
9. [BMES'16a] Anuradha Godavarty, Rebecca Kwasinski, Cristianne Fernandez, Yuanyuan Zhu*, Edwin Robledo, F. Perez-Clavijo, Ruogu Fang: 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.
10. [ISBI'16c] Ruogu Fang, Xing Pang*, Arash Dadkhah, Jiali Lei, Elizabeth Solis, Suset Rodriguez, 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)
11. [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%)
12. [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)
13. [OSA'16] Xing Pang*, Arash Dadkhah, Jiali Lei, Elizabeth Solis, Suset Rodriguez, Francisco Perez-Clavijo, Stephen Wigley, Ruogu Fang, Anuradha Godvarty: Near-Infrared Optical Imaging and Wound Segmentation in Lower Extremity Ulcers, in *Optical Society of America Annual Meeting (OSA)*, 2016.
14. [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.
15. [WI'16] Ruogu Fang, Xing Pang*, Arash Dadkhah, Jiali Lei, Elizabeth Solis, Suset ROrdriguez, 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.

16. [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%**)
17. [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)
18. [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)
19. [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).
20. [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%**
21. [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)
22. [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)
23. [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)
24. [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)
25. [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)
26. [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)
27. [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)

28. [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)
29. [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)
30. [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**).
31. [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).
32. [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;

5. 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 (IF: 2.005); Computerized Methods and Programs in Biomedicine (IF: 1.964) IEEE Transaction 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 Processing Letter; IBM Journal of Research and Development; Cancer Informatics; Machine 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 University of Florida, 2015-.

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

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.

Yuanyuan 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
Cornell University
Ithaca, NY. 14853
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Pina C. Sanelli (Clinical Mentor and Collaborator)
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Vice Chairman of Research
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James Duncan
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