Wenwen Jiang

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EDUCATION

University of California, Berkeley — Berkeley, CA
Doctoral, Bioengineering, GPA: 3.83 — *September 2011– present*

University of California, Berkeley — Berkeley, CA
Master of Science, Electrical Engineering & Computer Sciences — *August 2012– May 2014*

Related Coursework: Digital Image Processing, Computer Vision, Image Manipulation and Computational Photography, Linear System Theory, Convex Optimization, Advanced Image Reconstruction, Digital Signal Processing, Machine Learning, Medical Imaging Signals and Systems, Anatomy/Physiology

SUMMARY

Seeking for software engineer position in an innovative and dynamic environment

Interests: Computational Imaging, Computer Vision, Image Processing/Reconstruction, Signal Processing, Compressed Sensing, Machine Learning

EXPERIENCES

HeartVista, Inc — Menlo Park, CA
Software Engineer Intern — *May 2014 – August 2014*

- Implemented fast MR image processing/reconstruction algorithms in C++
- Designed QT based GUI with Javascript interface and created unit tests for the main software product

UC Berkeley/UCSF Magnetic Resonance Imaging Lab — Berkeley & San Francisco, CA
Research Assistant with Professor Michael Lustig and Professor Peder Larson — *August 2012 – present*

- Develop rapid imaging acquisition/iterative reconstruction methods for different applications
- Design novel pulse sequences for imaging acquisition
- Motion estimation and correction for imaging
- Implement advanced image processing/signal processing techniques

Berkeley Imaging System Lab — Berkeley, CA
Research Rotation with Professor Steve Conolly — *September 2011 – December 2011*

- Explored the properties and proved the feasibility of SPIO particles on a novel imaging modality
- Designed and built a medical MEMS device prototype

UC Berkeley — Berkeley, CA
Graduate Student Instructor — *August 2015 – May 2016*

Medical Imaging Signals and Systems (EE145C):

- A cross-listed undergrad/grad class on general imaging mechanism and various medical imaging modalities
- Lead weekly discussion session and hold office hours

Principles of Magnetic Resonance Imaging (EE225E):

- Graduate class covering MRI physics, imaging principles, applications and advanced topics
- Run lab sessions and hold office hours

SKILLS

- C/C++ (proficient), Matlab (proficient), Python, JavaScript (basic)
- Proficient in version control (Git/SVN)
- Proficient in UNIX or Linux platform

HONORS/AWARDS

- ISMRM Merit Awards: Summa Cum Laude (2016) and Magna Cum Laude (2015)
- Surbeck Young Investigator Award, 2nd Place (2015)
- GEMS Fellowship by HHMI (2014)
- First Place Outstanding Poster Presentation, Bioengineering Annual Retreat (2012)
- Guangdong HeJing Outstanding Student Scholarship, First Class Honor (2011)
- Ministry of Education of People's Republic of China National Scholarship (2010)
- National Undergraduate Mathematical Contest in Modeling, 3rd Prize (CUMCM' 2010)
- University Merit Scholarship (2008,2009,2010)

PUBLICATIONS

1. ***Wenwen Jiang***, *Peder E.Z. Larson, Michael Lustig. Simultaneous Estimation of Auto-calibration Data and Gradient Delays in non-Cartesian Parallel MRI using Low-rank Constraints. (in progress)*
2. ***Wenwen Jiang***, *Frank Ong, Kevin M Johnson, Scott K Nagle, Thomas Hope, Michael Lustig, Peder E.Z. Larson. Motion Robust High Resolution 3D Free-Breathing Pulmonary Imaging. (in progress)*
3. ***Wenwen Jiang***, *Michael Lustig, Peder E.Z. Larson. Concentric Rings K-space Trajectory for Hyperpolarized C-13 MRSI. Magn Reson Med. 2016 Jan;75(1):19-31.*
4. *Shuyu Tang,* ***Wenwen Jiang***, *Hsin-yu Chen, Robert Bok, Daniel B. Vigneron, Peder E.Z.Larson. Development of a Novel 2DRF Pulse Sequence to Achieve Improved Localization in Hyperpolarized C-13 imaging. Magn Reson Med. 2015 Aug; 74:506-512.*
5. ***Wenwen Jiang***, *Peder E.Z. Larson, Michael Lustig. Simultaneous Estimation of Auto-calibration Data and Gradient Delays in non-Cartesian Parallel MRI using Low-rank Constraints. In Proceedings of the 24th ISMRM Annual Meeting and Exhibition, Singapore, 2016.*
6. ***Wenwen Jiang***, *Frank Ong, Kevin M Johnson, Scott K Nagle, Thomas Hope, Michael Lustig, Peder E.Z. Larson. Soft-gating and Motion Resolved Reconstructions for Free-Breathing Pulmonary Imaging. In Proceedings of the 24th ISMRM Annual Meeting and Exhibition, Singapore, 2016.*
7. *Misung Han,* ***Wenwen Jiang***, *Roland Krug, Peder Larson, and Viola Rieke. Acceleration of 3D UTE Imaging to Quantify Temperature Dependent T1 Changes in Cortical Bone. In Proceedings of the 24th ISMRM Annual Meeting and Exhibition, Singapore, 2016.*
8. ***Wenwen Jiang***, *Michael Lustig, Peder E.Z. Larson. Parallel Imaging using a Concentric Rings Trajectory and Application to Hyperpolarized C-13 MRSI. In Proceedings of the 23rd ISMRM Annual Meeting and Exhibition, Toronto, Canada, 2015.*
9. ***Wenwen Jiang***, *Frank Ong, Roland Henry, Michael Lustig, Peder E.Z. Larson. L1-ESPIRiT Reconstruction for accelerating 3D UTE and denoising. In Proceedings of the 23rd ISMRM Annual Meeting and Exhibition, Toronto, Canada, 2015.*
10. *Frank Ong, Martin Uecker,* ***Wenwen Jiang***, *Michael Lustig. Fast Non-Cartesian Reconstruction with Pruned Fast Fourier Transform. In Proceedings of the 23rd ISMRM Annual Meeting and Exhibition, Toronto, Canada, 2015.*
11. ***Wenwen Jiang***, *Michael Lustig, John Pauly, Peder E.Z. Larson. Variable Density 2D Spiral Excitation with Self Compressed Sensing. In Proceedings of the 22nd ISMRM Annual Meeting and Exhibition, Milan, Italy, 2014.*
12. ***Wenwen Jiang***, *Michael Lustig, Martin Uecker, Peder E.Z. Larson. Evaluating the Efficiency of Concentric Rings K-space Trajectory for Hyperpolarized C-13 MRSI. In Proceedings of the 22nd ISMRM Annual Meeting and Exhibition, Milan, Italy, 2014.*
13. ***Wenwen Jiang***, *Michael Lustig, Peder E.Z. Larson. Concentric Rings K-space Trajectory for Hyperpolarized C-13 MRSI. In Proceedings of the 21st ISMRM Annual Meeting and Exhibition, Salt Lake City, UT, USA, 2013.*