CHUNMING GU

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EDUCATION

Ph.D. Johns Hopkins University, Biomedical Engineering 2018-Present

B.Eng. Xi'an Jiaotong University, Biomedical Engineering 2014-2018
Graduated with the highest distinction

RESEARCH EXPERIENCE

Graduate Research Assistant 08/2018-Present
F.M. Kirby Research Center for Functional Brain Imaging
Kennedy Krieger Institute, Baltimore, MD, USA
The Russell H. Morgan Department of Radiology and Radiological Sciences
Johns Hopkins University School of Medicine, Baltimore, MD, USA
Advisor: Dr. Jun Hua

Undergraduate Dissertation 02/2018-05/2018
Institute of Biomedical Engineering and Informatics (BMTI)
Technische Universität Ilmenau, Ilmenau, Thüringen, Germany
Advisor: Lorenz Esch, Daniel Strohmeier

- Project: Implementation and validation of functional brain connectivity measures for Electroencephalography (EEG) and Magnetoencephalography (MEG) data
- The implementation was performed in the open-source MNE-CPP project, written in C++. The validation of the resulting algorithms made use of existing EEG and MEG datasets.

Summer Research Student 07/2017-09/2017
Department of Radiological Sciences
David Geffen School of Medicine, University of California, Los Angeles, CA, USA
Advisor: Dr. Peng Hu, Dr. Yingli Yang, Yu Gao

- Cross-disciplinary Scholars in Science and Technology Program (CSST)
- Project: Longitudinal Diffusion MRI for Predicting Response to Radiotherapy in Sarcoma Patients

Visiting Student 06/2016-07/2016
Faculty of Pharmaceutical Sciences
University of British Columbia (UBC), Vancouver, BC, Canada

TEACHING EXPERIENCE

Xi'an Jiaotong University, Xi'an, Shaanxi, China 12/2014-06/2015
Volunteer of Teaching Assistant and Academic Counselor
Undergraduate Academic Counseling Center, ChungYing College

- Offered tutorial lectures to a series of courses like Linear Algebra
- Awarded as one of the best volunteers at XJTU in 2016

HONORS AND AWARDS

New Entrant Stipend 2018
International Society for Magnetic Resonance in Medicine (ISMRM)

CSST Summer Research Fellowship 2017
University of California, Los Angeles

Dean's Scholarship 2017
ChungYing College & Cyrus Tang Foundation

The National Scholarship 2015, 2016 and 2017
Top 2% of Chinese undergraduates

PUBLICATIONS

Journal Publications

1. S Zhang, R Xu, S Shang, Y Han, S Liu, T Xu, **C Gu**, X Zhu, G Niu, M Wan. In vivo monitoring of microwave ablation in a porcine model using ultrasonic differential attenuation coefficient intercept imaging. *International Journal of Hyperthermia*, 2018, 34:1-14.
2. S Zhang, S Shang, Y Han, **C Gu**, S Wu, S Liu, G Niu, A Bouakaz, M Wan. Ex vivo and in vivo monitoring and characterization of thermal lesions by high-intensity focused ultrasound and microwave ablation using ultrasonic Nakagami imaging. *IEEE Transactions on Medical Imaging*, 2018, 37(7):1701-1710.

Conference Proceedings

1. A Paez, S Rajan, G Chaney, X Miao, D Cao, **C Gu**, D Liu, A Pantelyat, L Rosenthal, Z Mari, K Mills, T Dawson, P van Zijl, S Bassett, D Yousem, V Kamath, and J Hua. Olfactory functional MRI (fMRI) using T2-prepared BOLD fMRI at ultra-high field (7T). *International Society for Magnetic Resonance in Medicine*, 2018.
2. Y Gao, **C Gu**, J Kim, M Cao, J Fu, A Kalbasi, D Ruan, et al. Treatment Response Prediction Using Texture Features from Longitudinal Diffusion MRI in Sarcoma Patients. In *MEDICAL PHYSICS*, vol. 45, no. 6, pp. E582-E582, 2018.

3. Y Gao, **C Gu**, J Kim, M Cao, A Kalbasi, D Ruan, D Low, P Hu, and Y Yang. Longitudinal Diffusion MRI for Predicting Response to Radiotherapy in Sarcoma Patients. *International Society for Magnetic Resonance in Medicine*, 2018.
4. S Zhang, S Shang, Y Han, R Xu, **C Gu**, L Zhang, S Wu, G Niu, and M Wan. In Vivo and Ex Vivo Monitoring of Thermal Ablation in a Porcine Model Using Ultrasonic Nakagami Imaging. *International Society for Therapeutic Ultrasound*, 2017.

Posters

1. K Zhang, L Chen, A Paez, X Miao, D Cao, **C Gu**, P van Zijl, A Bakker, and J Hua. Layer specific T2-prepared BOLD fMRI in the entorhinal cortex at 7T: initial results. *4th ICP network symposium*, 2019, Baltimore, MD, USA.
2. A Paez, S Rajan, G Chaney, X Miao, D Cao, **C Gu,** D Liu, A Pantelyat, L Rosenthal, Z Mari, K Mills, T Dawson, P van Zijl, S Bassett, D Yousem, V Kamath, and J Hua. Imaging the Olfactory Cortex at 7T. *MHSRS*, 2019, Kissimmee, FL, USA.

PRESENTATIONS AND INVITED LECTURES

1. **C Gu**, D Cao, A Paez, R Margolis, P van Zijl, C Ross and J Hua. Longitudinal Changes in Arteriolar Cerebral Blood Volume in Huntington's Disease. *4th ICP network symposium*, 2019, Baltimore, MD, USA.
2. **C Gu**, D Cao, A Paez, R Margolis, P van Zijl, C Ross and J Hua. Longitudinal Changes in Arteriolar Cerebral Blood Volume in Huntington's Disease. *22nd Annual Division of MR Research Retreat*, 2019, Cambridge, MD, USA.

PROFESSIONAL TRAINING

Philips Pulse Programming Environment Workshop
Philips Healthcare, Rochester, MN, USA, 2019

Philips SDM Workshop
Philips Healthcare, Rochester, MN, USA, 2019

PROFESSIONAL AFFILIATIONS

Member, International Society for Magnetic Resonance in Medicine (ISMRM), 2018-Present

COMMUNITY SERVICE

Undergraduate Academic Counseling Center 07/2016-07/2017
Director, ChungYing College, Xi'an Jiaotong University

LANGUAGES

Chinese: Native Language

English: Working Proficiency

Japanese: Reading Knowledge

COMPUTER SKILLS

Programming: C++, Python

Platforms: MATLAB, R

ACCOMPLISHMENTS

Coursera course certificates

- Data Science: The R Programming Environment, Managing Data Analysis, A Crash Course in Data Science, The Data Scientist's Toolbox, Data Science in Real Life
- Biology & Medicine: Understanding Cancer Metastasis, Introduction to the Biology of Cancer
- Imaging Science: Introduction to Neurohacking In R, Principles of fMRI 1, Fundamental Neuroscience for Neuroimaging

REFERENCE

Dr. Jun Hua, Associate Professor
F.M. Kirby Research Center for Functional Brain Imaging
Kennedy Krieger Institute
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Johns Hopkins University School of Medicine
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