

RUI SUN

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EDUCATION

Carnegie Mellon University, Pittsburgh, PA, U.S.A *Expected Dec. 2021*
Ph.D. in Biomedical Engineering

Carnegie Mellon University, Pittsburgh, PA, U.S.A *Aug. 2016-Dec.2017*
M.S. in Electrical and Computer Engineering **GPA: 4.00 / 4.00**

Fudan University, Shanghai, China *Sept. 2012-June 2016*
B.S. in Electronic Engineering **GPA: 3.79 / 4.00** **Ranking: 1 / 102**

RESEARCH EXPERIENCE:

Graduate Research Assistant: *Sept.2016-Dec.2017*
Supervised by Prof. Pulkit Grover, Carnegie Mellon University

- Built sensor placement model and brain signal forward model for scalp EEG and intracranial EEG.
- Localized active brain area using minimum-norm least-squares estimation.
- Performed analysis on cortical stimulation data of epilepsy patients using machine learning techniques to identify intracranial electrodes.
- Analyzed spatiotemporal properties and dynamic models of EEG signals.

Undergraduate capstone research project: *Oct.2015-Apr.2016*
Medical Signal Processing Lab, supervised by Prof. Yuanyuan Wang, Fudan University

- Implemented and compared four different Convolutional Neural Networks for lymph nodes detection.

PUBLICATIONS

Rui Sun, Pulkit Grover, Rudina Morina, M. Bremner, P. Venkatesh, A. Bagic, M. Richardson, J. W Pan, A Urban, N. Zaher and A. Antony. "Analysis of cortical stimulation data to localize intracranial electrodes using simultaneous scalp and stereo EEG recordings", 2017, American Epilepsy Society Annual Meeting

TEACHING EXPERIENCE:

Teaching Assistant, Signals and Systems: *Fall 2017*

- Prepare Matlab coding problems and explain challenging concepts and math problems to students

Teaching Assistant, Introduction to Machine learning: *Spring 2016*

- Led and guided class projects for solving real life machine learning problems
- Created and tested **Python** problems; graded course assessments

AWARDS AND HONORS

National Scholarship, awarded by Ministry of Education of China (1 over 102 in EE Department), 2013, 2015
Chiang Chen Overseas Graduate Fellowship, (10 recipients in China each year), awarded by Chiang Chen Industrial Charity Foundation, 2015