Siyuan Gao

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EDUCATION

Yale University, New Haven, Connecticut, USA

- Ph.D. in Engineering — Sep 2016 – May 2021
  - Adviser: Prof. Todd Constable
  - Focus: Machine learning, neuroimaging, signal processing.
- B.S. in Mathematics and Applied Mathematics — Sep 2012 – May 2016
  - Adviser: Prof. Wei Chen
  - Graduated with College Honors.

RESEARCH EXPERIENCE

Department of Computer Science, New York University, Shanghai

- Undergraduate Research Student — Feb 2016 – May 2016
  - Supervisors: Prof. Nan Cao
  - Project: RCLens: Interactive Rare Category Exploration and Identification
  - Published one paper in TVCG.

Department of Biomedical Engineering, University of California, Davis

- Undergraduate Research Student — Jul 2015 – Sep 2015
  - Supervisors: Prof. Jinyi Qi
  - Project: Developed an algorithm to improve performance of statistical PET image reconstruction.

PUBLICATIONS

JOURNALS

[3] A. Greene, S. Gao, R. Constable, D. Scheinost, "Task-induced brain state manipulation improves prediction of individual traits," *Nature Communications*, 2018.

[2] H. Lin, S. Gao, D. Gotz, F. Du, J. He, N. Cao, "RCLens: Interactive Rare Category Exploration and Identification," *IEEE Transactions on Visualization and Computer Graphics (TVCG)*, 2017.

[1] F. Wang, W. Chen, Y. Zhao, T. Gu, S. Gao, H. Bao, "Adaptively Exploring Population Mobility Patterns in Flow Visualization," *IEEE Transactions on Intelligent Transportation Systems*, 2017.

CONFERENCES

[4] S. Gao, A. Greene, R. Constable, D. Scheinost, "Combining Multiple Connectomes via Canonical Correlation Analysis Improves Predictive Models," in *International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI)*, Granada, Spain, Sep 2018.

[3] S. Gao, A. Greene, R. Constable, D. Scheinost, "Task Integration For Connectome-based Prediction Via Canonical Correlation Analysis," in *IEEE International Symposium on Biomedical Imaging (ISBI)*, Washington, D.C., USA, Apr 2018.

[2] A. Greene, S. Gao, R. Constable, D. Scheinost, "Brain state perturbation improves connectome-based predictive modeling of related behaviors," in *Society for Neuroscience (SfN)*, Washington, D.C., USA, Nov 2017.

[1] A. Greene, S. Gao, R. Constable, D. Scheinost, "Connectome-based predictive modeling: the impact of brain state and sex in a developmental cohort," in *Flux Congress*, Portland, Oregon, USA Sep 2017.

TEACHING EXPERIENCE

Teaching Assistant, *BENG352:* Biomedical Signals & Images — Jan 2018 – Jun 2018

AWARDS & SCHOLARSHIPS

- Yale University Graduate Fellowship — 2016 – 2021
- Outstanding graduate of Zhejiang Province — May 2016
- National Scholarship — 2014 – 2015
  GPA top 1.5%
- First-Class Scholarship for Outstanding Students — 2014 – 2015
- Outstanding Student Leader Awards — 2012 – 2013

SKILLS

MATLAB, Python R, C++