FENG XUE Ph.D.

DATA SCIENCE / INFORMATICS / NEUROIMAGING

10846 Cariuto Ct., San Diego, CA 92124　　Cell: (213) 249-1040　　Email: xfgavin@gmail.com

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TECHNICAL PROFICIENCIES

- Machine Learning: Python/scikit-learn/pandas/numpy
- HPC: SGE/Slurm
- Virtualization: Docker/Singularity
- Data processing: Matlab/Excel (VBA)/Shell/Python/R/SPSS
- Web application: ASP/MSSQL, PHP/MySQL, Python/PGSQL
- Network/system administration: Windows/Linux/lvm/ldap/switching/routing/VPN/ipv6

PROFESSIONAL EXPERIENCE

Computational & Data Science Research Specialist III　　　*UCSD   2018.12-present*

- Pipeline software optimization: Matlab/Python/pandas/scipy/numpy/pydicom/Shell
- Pipeline software virtualization: Docker/Singularity
- Neuroimaing data curation/analysis/release
- HPC job scheduling/optimization: SGE/Slurm
- Published 1 co-authored paper

Bioinformatics Programmer II　　　*UCSD   2017.2-2018.12*

- Pipeline software optimization: Matlab/Python/Shell
- Neuroimaing data curation/analysis/release
- Technical consultation

System Architect / Contractor　　　*BNU, the CBLSC, Beijing, China 2013.11-present*

- Linux HPC configuration/optimization/administration: SGE/lvm/ldap/switching/ipv6

Research Scientist　　　*USC, 2015.8-2017.2*

- Neuroimaging data modeling/mining: GLM/clustering/correlation, SPSS/R/Excel/Shell
- Linux HPC configuration/optimization/administration : SGE/ldap/lvm
- Published 1 1st-authored paper, 3 2nd-authored paper, 1 1st-authored paper in revision.

Postdoctoral Research Associate　　　*USC, 2011.1-2015.8*

- Experimental devices/program assembly/coding: soldering/Matlab/Shell
- Neuroimaing data collection/curation: Siemens Trio 3T MRI scanner/DICOM/PACS
- Published 1 2nd-authored paper, 4 co-authored paper.

ONGOING PROJECTS

- Using machine learning (Python/scikit-learn/pandas/numpy/XGBoost) to reanalyze previous neuroimaging data: seeking sensitive brain regions for risky decision-making.
- sclib (https://github.com/xfgavin/sclib): a shell script library to handle csv files.
- pysmat (https://github.com/xfgavin/pysmat): Python csv <-> Matlab/Octave format convertor
- ABCD docker (https://github.com/xfgavin/abcd_docker): docker image with compiled Multiple Model Pipeline Software for the ABCD study (https://abcdstudy.org/study-sites/daic/).

EDUCATION & CERTIFICATION

CICSO certification on Routing and Switching

CCNA was certified in April 2014, passed CCNP switching test in 2015

Beijing Normal University, Beijing, China

Ph.d. in Developmental & Educational Psychology, Sept 2003 - June 2010

Published 1 dissertation, 7 co-authored paper

Bachelor of Science in Psychology, Sept 1998 - June 2002