# FENG XUE Ph.D.

## DATA SCIENCE / INFORMATICS / NEUROIMAGING

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### **TECHNICAL PROFICIENCIES**

- Machine Learning: Python/scikit-learn/pandas/numpy
- HPC/Cloud: SGE/Slurm/AWS
- Virtualization: Docker/Singularity
- Data processing/Visualization: Matlab/Excel (VBA)/Shell/Python/R/SPSS/Tableau
- Web application: ASP/MSSQL, PHP/MySQL, Python/PGSQL
- IoT: Home Assistant/OpenCV

# PROFESSIONAL EXPERIENCE

### **Senior Medical Informatics Analyst**

Blue Shield California 2019.10-present

Medical claim data analysis: Excel (VBA)/SAS/SQL

### Computational & Data Science Research Specialist III

UCSD 2018.12-2019.10

- Pipeline software optimization & virtualization: Matlab/Python/pandas/scipy/numpy/Shell/Docker
- HPC job scheduling/optimization: SGE/Slurm

### **Bioinformatics Programmer II**

UCSD 2017.2-2018.12

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

### **System Architect / Contractor**

BNU, the CBLSC, Beijing, China 2013.11-present

Linux HPC configuration/optimization/administration: SGE/ldap/switching/ipv6/AWS

**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 2<sup>nd</sup>-authored paper, 4 co-authored paper.

### **ONGOING PROJECTS**

- Using machine learning (Python/scikit-learn/pandas/numpy) to reanalyze previous neuroimaging data: seeking sensitive brain regions for risky decision-making.
- Baby presence detection using Home Assistant and OpenCV.
- 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 for the ABCD study.

### FORMAL EDUCATION

### 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

### **FURTHER EDUCATION**

### **Machine Learning**

Stanford University via Coursera, Feb 2020

### **Data Visualization and Communication with Tableau**

Duke University via Coursera, April 2020