Wei Fu

http://fuwei.us
wfu@ncsu.edu | 919.534.5251

EDUCATION

NC STATE UNIVERSITY
PhD in Computer Science
Expected May 2018 | Raleigh, USA
GPA: 4.0/4.0

BEIJING UNIVERSITY OF POSTS &TELECOMM
MS in Electrical Engineering
Grad Feb 2012 | Beijing, China
GPA: 86.5/100

NANJING TECH UNIVERSITY
BS in Electrical Engineering
Grad Jun 2009 | Nanjing, China
GPA: 90.1/100

LINKS

Github:// **weifoo**
Facebook:// **fuweius**
Twitter:// **@fuwei1987**

COURSEWORK

Software Engineering
Search-based Software Engineering
Advanced Software Engineering
Introduction to Data Mining
Spatial/Tempo Data Mining
Algorithm
Computer Networks
Computer Performance Modeling
Internet Protocol
Statistics
Wireless Communication

SKILLS

PROGRAMMING
Python • C# • C++ • Java • Matlab
JavaScript • LaTeX• HTML• SQL
R • Bootstrap • Ajax • Google Map API

OS
Linux • MAC OS • Windows

TEACHING

ECE109 Intro to Computer Systems
ECE212 Fundamentals of Logic Design
ECE220 Foundations of Electrical &
Computer Engineering

RESEARCH

SEARCH-BASED SOFTWARE ENGINEERING | Nov 2014 – Now
Research Assistant, with Dr. Tim Menzies, NC State University
In our experiment, we observe that learners with empirical value of parameters are not optimal for different applications. In this research, those magic parameters in data mining techniques, like k in K-means, will be tuned by search-based software engineering algorithm with local data set and thereafter the learner with optimal parameters will be used for local data mining.

TRANSFER LEARNING IN SE | Sep 2014 – Now
Research Assistant, with Dr. Tim Menzies, NC State University
The goal of the research is to enable software engineers to find software development best practices from past empirical data. Using data from real software projects, the project will determine and validate best practices in three areas: predicting software development effort; isolating software detects; effective code inspection practices.

D2D IN CELLULAR NETWORKS | Mar 2012 – Mar 2013
Research Assistant, with Dr. Feifei Gao, Tsinghua University
We designed a null-space based robust interference avoiding strategy for Device-to-Device communication underlaying networks and verified theoretical results with link-level simulation. Also, I Investigated interference issues in small-cell communication networks. One paper and one patent published.

PROJECT

IMAGE CLASSIFICATION BY DEEP LEARNING | Jan 2015 – Now
Course Project, NC State University
Based on the volcano image data set, we'd like to implement deep learning methods to extract features and classify images into volcano and non-volcano classes. Further, the algorithm will tell whether the image is showing an active volcano or not.

P2P FILE SHARING SYSTEM | Feb 2014 – Apr 2014
Course Project, NC State University
This is a simple Peer-to-Peer system with a centralized index, in which a concurrent server that is capable of carrying out communication with multiple clients. When peers join in this P2P system, they can add the local file names to file list in the server, and query, request to download files from some destination peer over TCP protocol after looking up specific files from the server.

INTELLIGENT MONITORING SYSTEM | Mar 2010 – Dec 2010
Business Project, Beijing University of Posts & Telecomm
By combing GPS terminal, Google Map API and Asp.net, this system will monitor and track the staffs with GPS terminals. The manager can also distribute working plans and check corresponding progress. Ajax, Server Push and Google Map API are applied in this project.

PUBLICATION

W. Fu, R. C. Yao, F. Gao, J.C.F. Li, and M. Lei, "Robust Null-Space Based Interference Avoid- ing Scheme for D2D Communication Underlaying Cellular Networks", IEEE WCNC, Shanghai, China, Apr. 2013.

PATENT

F. Gao, W. Fu, J.C.F. Li, and M. Lei, "Null-space Based Robust Interference Mitigation Method for Multiple-antenna D2D Communication System," Nov, 2012.