

OBJECTIVE

I'm looking for an internship related to data mining and software development.

EDUCATION

PhD. CS North Carolina State University

Aug, 2013 - Present

GPA: 3.967/4.0

MS. EE Beijing University of Posts and Telecomm

Sep, 2009 - Apr, 2012

Overall GPA: 83/100, Major GPA: 86/100.

BS. EE Nanjing University of Technology

Sep, 2005 - Jun, 2009

Overall GPA: 88/100, Major GPA: 90/100, Ranking: 5%.

PROJECTS

Transfer Learning in Software Engineering

May, 2015 - Present

Research Assistant with Dr. Tim Menzies, North Carolina State University, USA

- The goal of the research is to enable software engineers to find software development best practices from past empirical data. For some new projects or small companies, historical data may not be available. This project proposes to use data from different software projects or even different companies to build a learning model by transfer learning methods, potential defects in the new software modules or projects will be predicted based on features collected from the code repositories.

Defect Prediction with Search-based Software Engineering

Sep, 2014 - Present

Research Assistant with Dr. Tim Menzies, North Carolina State University, USA

- One of the “black arts” of data mining is setting the tuning parameters that control the miner. By using searching algorithms like Differential Evolutionary, we offer a simple, automatic, and very effective method for finding those tunings. In our experiment, when learning software defect predictors, this method can quickly find tunings that alter detection F-Measure from 12% to 78%. These results prompt for a change to standard methods in software analytics. At least for defect prediction, it is no longer enough to just run a data miner and present the result *without* conducting a tuning optimization study.

P2P File Sharing System

Feb, 2014 - Apr, 2014

Coursework, North Carolina State University, USA

- Implemented a simple Peer-to-Peer system with a centralized index, in which a concurrent server that is capable of carrying out communications with multiple clients simultaneously and maintains the peer and files lists accordingly when peers join and leave randomly. Socket programming is used.

Intelligent Patrol Monitoring System

Mar, 2010 - Dec, 2010

Leader, Beijing University of Posts and Telecommunications, China

- This system will help mobile network company (China Mobile) to manage daily maintenance works, especially for those work about checking transmitting bases, fiber networks and so on. The manager can distribute working schedules and check corresponding progress. Also, they could monitor and track any teams working in the field on Google Map.

SKILLS & COURSES

Languages Python, C++, Java, ASP.NET, JavaScript, HTML, R, Matlab, SQL, Shell, L^AT_EX

Tools ScikitLearn, Weka, Ajax, Bootstrap, Grunt, Git, Google Maps API

Platforms Mac OS X, Linux, Microsoft Windows

Networking TCP/IP, Routing Protocols, Socket Programming, VPN, LTE, MIMO, D2D

Courses Computer Networks, Internet Protocol, Algorithm, Operating System, Statistics, Software Engineering, Search-based Software Engineering, Database System, Software Engineering as human activity, Spatial and Temporal Data Mining

PUBLICATION

- W. Fu, T. Menzies, X. Shen, “Tuning for Software Analytics: is it Really Necessary?”, *IEEE/ACM ICSE 2016*, submitted.
- W. Fu, R. C. Yao, F. Gao, J.C.F. Li, and M. Lei, “Robust Null-Space Based Interference Avoiding Scheme for D2D Communication Underlying Cellular Networks,” *IEEE WCNC*, Shanghai, China, Apr. 2013.