

Xiaolu Xiong

410 Homer St, Newton, MA, 02459

(617)909-8221

xxiong@wpi.edu

Objective

Experienced, results-oriented Software Developer/Data Researcher seeking summer internship in Computer Science

Education

Worcester Polytechnic Institute

Worcester, MA

Doctor of Philosophy in Computer Science (GPA 3.9/4.0)

Aug, 2011-May, 2016

Brandeis University

Waltham, MA

Master of Arts in Computer Science

Aug, 2007-Dec, 2008

Beijing University of Chemical Technology

Beijing, China

Bachelor of Science in Applied Mathematics

Aug, 2003-Jul, 2007

Experience

Software Engineering Intern, edX

Cambridge, MA

June, 2015-Aug, 2015

- Studied design and implementation details of Massive Open Online Course system and open source development workflow.
- Designed and implemented a shared data access framework to encourage cooperation and communication on the edX platform.

SDE Intern, Microsoft

Redmond, WA

June, 2014-Aug, 2014

- Designed a binary classification model to identify invalid in-game complaints by working with Xbox Live teams. This model reduced complaint processing workload by 55% while maintaining extremely high recall on valid complaints.
- Designed a real-time anomaly detection model to detect Xbox Live operation issues from social network streaming data. This model demonstrated the ability to detect outage events 25 minutes before official notification system acknowledged.
- Followed the best practice of Microsoft software development to design and implement a machine learning engine to work with above two models and serve as the backbone of future data mining projects in Xbox Live Operations.

Data Mining Research Assistant, Worcester Polytechnic Institute

Worcester, MA

Aug, 2011-Present

- Applied various data mining and machine learning technologies to large-scale datasets to help improve student learning and retention performance, and also studied upper bounds of student modeling problems and different measurement methods.
- Studied various optimization technologies for joining static and streaming data in an extended Hadoop environment.
- Developed and maintained an intelligent tutoring systems used by tens of thousands of students worldwide involving: Java/GWT, Nginx/Ruby on Rails/Mongrel, PostgreSQL.

Application Developer, SocialEdison.com

Los Angeles, CA

Feb, 2011-Aug, 2011

- Designed and built several marketing tools to reach potential customers.
- Implemented a Facebook-WordPress commenting plugin to synchronize data between different sites.

Software Engineer, Edison Mission Marketing & Trading

Boston, MA

Feb, 2009-Jan, 2011

- Built up and maintained backend modules in Python/C to help analysis in trading decisions.
- Maintained and developed an analysis web app in TurboGears, which provided a friendly and powerful interface for data analysis.
- Implemented infrastructure software and data objects, analysis tools and ORM tools, improved analysis efficiency.
- Deployed multifunctional unit test framework to provide coverage, error, and statistics data.
- Optimized program data structure and reduced running time by 85%.

Quality Assurance, IBM China Software Development Lab

Beijing, China

Jan, 2007-Aug, 2007

- Performed I18N & L10N testing on Lotus Notes and related applications to improve production quality.
- Prompted as Language QA Leader with the responsibilities of coordinating test procedures between testers and developers.

Technical Skills

Operating System: UNIX (Solaris, Mac OS), Linux (Red Hat, Ubuntu), Windows Series

Programming Language: Python, Java, Ruby, C, JavaScript, SQL, Haskell, C#

Database: Oracle, MySQL, PostgreSQL, Hadoop, Pig

Publications

Using and Designing Platforms for In Vivo Educational Experiments

AIED 2015

Joseph Jay Williams, Korinn Ostrow, Xiaolu Xiong, et al.

Improving Students' Long-Term Retention Performance: A Study on Personalized Retention Schedules

LAK 2015

Xiaolu Xiong, Yan Wang, Joseph B. Beck

A Study of Exploring Different Schedules of Spacing and Retrieval Interval on Mathematics Skills in ITS Environment

ITS 2014

Xiaolu Xiong, Joseph E. Beck

Improving Retention Performance Prediction with Prerequisite Skill Features

EDM 2014

Xiaolu Xiong, Seth A. Adjei, Neil T. Heffernan

Limits to Accuracy: How Well Can We Do at Student Modeling?

EDM 2013

Joseph E. Beck, Xiaolu Xiong

Modeling Student Retention in an Environment with Delayed Testing

EDM 2013

Shoujing Li, Xiaolu Xiong, Joseph E. Beck

Class Distinctions: Leveraging Class-Level Features to Predict Student Retention Performance

AIED 2013

Xiaolu Xiong, Shoujing Li, Joseph E. Beck

Will You Get It Right Next Week: Predict Delayed Performance in Enhanced ITS Mastery Cycle

FLAIRS 2013

Xiaolu Xiong, Shoujing Li, Joseph E. Beck

An Analysis of Response Time Data for Improving Student Performance Prediction

KDD 2011

Xiaolu Xiong, Zachary A. Pardos, Neil T. Heffernan

Recommendations

SDE Intern, Microsoft

Matt Wilson

Xiaolu was fantastic to work with, he's a very detail orientated, and self-motivated individual. I was continuously impressed with how well he was able to work solo, with very little direction, yet still be able to transition to being a productive part of a larger team. I look forward to getting to work with him again!

Software Engineer, Edison Mission Marketing & Trading

Xingwen Li

I worked with Xiaolu on various projects when we transfer our risk models, such as asset evaluation model, to analytics group. I am impressed by his solid technique skills, his knowledge of the advanced models and their scripting. He is our reliable source of system management and system inquiries, always ready to help and always be able to solve the problems. He is just such a good guy to work with and he will bring peace of mind to a team.

Software Engineer, Edison Mission Marketing & Trading

Mauro Brigante

I supervised Xiaolu's work while at Edison Mission Marketing and Trading. Xiaolu is hard-working and dedicated and contributed significantly to various projects at the Quantitative Analysis desk.

Software Engineer, Edison Mission Marketing & Trading

Sergey Zhuravlev

Xiaolu Xiong is a very effective and diligent employee. I have seen him work well in a team and on his own. He would be a valuable addition to any group.