

Zhucheng (Michael) Tu

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SKILLS

PROGRAMMING

Proficient:

C/C++ • Python • Java
JavaScript • SQL

Familiar:

R • MATLAB • Scala • C#

SOFTWARE

Data:

Hadoop • Hive • Spark
Presto • Elasticsearch
NumPy • Pandas • scikit-learn • D3.js

Databases:

MySQL • PostgreSQL • Redis •
MongoDB

Web and Mobile:

Flask • Pyramid • Node.js
AngularJS • React • Android

Tools/Services:

Git • Vim • AWS • Docker • Thrift

EDUCATION

UNIVERSITY OF WATERLOO

BACHELOR OF SOFTWARE ENGINEERING,
GPA: 3.9

Sept 2012 - Apr 2017 | Waterloo, ON

LINKS

GitHub github.com/tuzhucheng

LinkedIn ca.linkedin.com/in/tuzhucheng

Quora quora.com/Michael-Tu-7

ACTIVITIES

- HackerRank Real Data Challenge - ranked 22/456 participants (Apr 2016)
- Math Faculty Orientation Leader (Sep 2015)
- Kaggle competition for MIT's *The Analytics Edge* course - ranked in top 21% (Aug 2015)
- Taught review sessions for CS 241 (compilers) for Students Offering Support non-profit organization (Winter 2014)
- MathSoc Representative for Software Engineering (Fall 2013)
- Software Engineering '17 Class Representative (Winter 2013)

WORK EXPERIENCE

FACEBOOK | DATA ENGINEERING INTERN

Jan 2016 – Apr 2016 | Menlo Park, CA

- Built data pipelines and visualizations using Hive, Presto, and React for Insights product to help businesses make data driven decisions on Instagram.
- Researched methodologies to rank posts for an audience to boost relevance.

REFLEKTION | SOFTWARE ENGINEERING INTERN, MACHINE LEARNING TEAM

Apr 2015 - Aug 2015 | San Mateo, CA

- Improved similar and trendy product ranking for recommender system.
- Led implementation and helped design data normalization module in Python.

REFLEKTION | SOFTWARE ENGINEERING INTERN, ANALYTICS TEAM

Aug 2014 - Dec 2014 | San Mateo, CA

- Implemented the experiment framework, integrated with Kafka/Storm pipeline.
- Prototyped a monitoring and alerting system using StatsD, Graphite, and Cabot.
- Wrote analytics APIs, improved Elasticsearch query speed by up to 5x.

BLACKBERRY | SOFTWARE DEVELOPER CO-OP, WEB SERVICES

Jan 2014 – Apr 2014 | Waterloo, ON

- Built mobile device management services using the Spring framework in Java.

UNIVERSITY OF WATERLOO | MOBILE APP DEVELOPER, SYSTEMS

Apr 2013 – Aug 2013 | Kitchener, ON

- Led development for Android app to help exam proctors monitor students.

RESEARCH EXPERIENCE

ECE DEPARTMENT, UWATERLOO | UNDERGRADUATE RESEARCH ASSISTANT

May 2016 – Present | Waterloo, ON

- Supervised by Prof. Mark Crowley working on machine learning for continuous detection of anomalous usage on enterprise smartphones.

CENTER FOR RESEARCH AND EDUCATION ON AGING, UC BERKELEY | RESEARCH ASSISTANT

Oct 2014 – Sep 2015 | Waterloo, ON

- Integrated relation extraction NLP program with PostgreSQL in Scala.
- Architected and built web app to visualize relations using React and D3.js.

PROJECTS

- **Arrhythmia Classification** Built models to classify arrhythmia patients.
- **Courser Alerter** Receive notifications when space opens up for full courses.
- **LaTeXMe** Chat app with \LaTeX support, built at Facebook Hackathon.
- **Sudoku Solver** Sudoku solver built for Windows 8 launch hackathon.

AWARDS

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| 2015 | Term Dean's Honour's List (multiple terms) |
| 2012 | President's Scholarship of Distinction |
| 2012 | University of Toronto National Book Award (one per high school) |