

Zhucheng (Michael) Tu

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SKILLS

PROGRAMMING

Proficient:

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

Familiar:

MATLAB • Scala

SOFTWARE

ML/Deep Learning:

PyTorch • NumPy
Pandas • scikit-learn

Data:

Hadoop • Hive • Spark
Presto • Elasticsearch

Databases:

PostgreSQL • MySQL
Redis • MongoDB

Web and Mobile:

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

Others:

Git • Vim • AWS • Docker • Thrift

EDUCATION

UNIVERSITY OF WATERLOO

MMATH THESIS

AREAS: INFORMATION RETRIEVAL/NLP

May 2017 - Apr 2018 | Waterloo, ON

UNIVERSITY OF WATERLOO

BACHELOR OF SOFTWARE ENGINEERING,
DEAN'S HONOUR'S LIST

Sept 2012 - Apr 2017 | Waterloo, ON

LINKS

GitHub github.com/tuzhucheng

LinkedIn ca.linkedin.com/in/tuzhucheng

Quora quora.com/Michael-Tu-7

ACTIVITIES

- Teaching assistant for CS 486 (Intro to AI) and CS 245 (Logic and Computation)
- Math Faculty Orientation Leader (Sep 2015)
- *The Analytics Edge* Kaggle competition - ranked in top 21% (Aug 2015)
- MathSoc and Class Representative for Software Engineering (2013)

WORK EXPERIENCE

UBER | SOFTWARE ENGINEERING INTERN / CO-OP, RISK

August - December 2016 | San Francisco, CA

- Engineer features for machine learning models to combat promotion fraud.
- Build text classification model to classify gibberish names.

FACEBOOK | DATA ENGINEERING INTERN

January - April 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

April - August 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

August - December 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

January - April 2014 | Waterloo, ON

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

PUBLICATIONS

- [1] Z. Tu, M. Crane, J. Zhang, and J. Lin. Prizm: An Exploration of Approaches to Integrating Neural Reranking Models in Multi-Stage Ranking Architectures. *Proceedings of the SIGIR 2017 Workshop on Neural Information Retrieval (Neu-IR'17)*, August 2017, Tokyo, Japan.
- [2] R. Sequiera, G. Baruah, Z. Tu, S. Mohammed, J. Rao, H. Zhang, and J. Lin. Exploring the Effectiveness of Convolutional Neural Networks for Answer Selection in End-to-End Question Answering. *Proceedings of the SIGIR 2017 Workshop on Neural Information Retrieval (Neu-IR'17)*, August 2017, Tokyo, Japan.
- [3] J. Lin, Z. Tu, M. Rose, and P. White. Prizm: A wireless access point for proxy-based web lifelogging. *Proceedings of the first Workshop on Lifelogging Tools and Applications*, pages 19-25. ACM, 2016.

AWARDS

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| 2017 | Nominated for Jessie W.H. Zou Memorial Award for Undergraduate Research |
| 2017 | Math Domestic Graduate Student Award |
| 2017 | University of Waterloo Graduate Scholarship |
| 2012 | President's Scholarship of Distinction |
| 2012 | University of Toronto National Book Award |