

Michael Lin

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SKILLS

LANGUAGES

Python • JavaScript • Ruby
Java • HTML • CSS

FRAMEWORKS & TOOLS

ReactJS • NodeJS
Rails • Flask • Django
Terraform • Ansible • Grafana
PostgreSQL • MongoDB • Docker
AWS • Softlayer • IBM Cloud

INDUSTRY KNOWLEDGE

Web Development • Scrum • Agile

LINKS

Github://ExiaSR
LinkedIn://michaellinlzc

EDUCATION

UNIVERSITY OF ALBERTA

COMPUTER SCIENCE, BSc

SPECIALIZATION

Science Internship Program
Expected Graduation May 2020

COURSEWORK

UNDERGRADUATE

Web Applications and Architecture
Software Process and Product
Management
Introduction to Software Engineering
Introduction to NLP
e-Learning, Adaptation, Analytics
Human Computer Interaction
Reinforcement learning
File and Database Management
Computer Networks
Operation System Concepts
Computer Organization and Architecture

EXPERIENCE

IBM | SOFTWARE ENGINEER

May 2017 – Current | Toronto, ON, Canada

- Developed and scaled microservices for Cognitive Class Virtual Lab Environment with NodeJS and Rails, supporting over 1M users worldwide.
- Built web applications with front-end technologies such as ES6, SASS, ReactJS as needed.
- Designed and maintained monitoring infrastructure with Elasticsearch, Prometheus, and Grafana to monitor server utilization, database performance, etc.
- Performed automated testing, continuous integration, and continuous deployment of different services with Github Enterprise, Travis CI, Docker, Ansible, Terraform, Cloud Foundry, Rancher, Artifactory, etc.
- Developed data pipeline and analytic reporting API consisting of organization-wide data to automate data collecting process and widely used by multiple teams.
- Instrumented user activity and analyzed data across different IBM products/partner products.

YY INC. | SOFTWARE ENGINEER INTERN

Jul 2016 – Aug 2016 | Guangzhou, China

- Developed scripts to automate and increase the efficiency of the building and releasing process. Used by a team of 10.
- Refactored the codebase with the latest MongoDB C++11 driver from the old C driver. Improved code readability and maintainability.
- Optimized MongoDB query to increase performance by 10%.
- Developed unit tests for several modules.
- Supported QA engineers in testing and debugging new release.

PROJECTS

BRO-SSESSMENT | MEASURING CAMARADERIE IN ONLINE FORUM

Feb 2019 – April 2019

- Developed a system to assess camaraderie through the analysis of peer-to-peer interaction in the online discussion forum. Using data from the Pepper Project, a learning management system research project from the University of Toronto.
- Researched on various topics in NLP, such as sentiment analysis, lexical entrainment, and latent semantic analysis, and applied them to measure connectedness between users.
- Studied users behavior in the discussion forum to produce behavior metrics.
- Analyzed multiple measurements and compared result against the classroom community scale, a measurement for the sense of community, of the discussion forum from the Pepper Project.

COLLABORATIVE LIST | PROJECT MANAGEMENT TOOL

Feb 2017 – March 2017

- Led a team of 5 people to develop a project management tool for scholar and faculty to keep track of the research material (books, articles, journals, videos, etc) for meeting and seminar.
- Designed system architecture and implemented backend with Flask, MongoDB, and Elasticsearch. Designed UI and built frontend client with ReactJS.
- Built CI/CD pipelines for containerized applications with Docker.