Ziying Zhang

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EDUCATION

UNIVERSITY OF WATERLOO
SYSTEMS DESIGN ENGINEERING
Graduating May 2018 | Waterloo, ON

CHINESE U. OF HONG KONG
COMPUTER & DATA ENGINEERING
Study abroad 2017 | Hong Kong

PROJECTS

VOICE ASSIST ✎
Voice-based nursing request system with automatic triaging, designed to digitize the nurse call experience

DIA-BUDDY ✎
Diabetes early-stage diagnosis and management tool powered by Microsoft Azure machine learning

TRAVELING TOURIST ✎
Optimizes a tourist's route through selected attractions and visualizes it

SKILLS

PROGRAMMING:
Python • Scala • JavaScript
BACK-END:
Node.js • Play • Flask • Django
SQL • Cassandra • MongoDB
Jenkins • Bash
FRONT-END:
React • AngularJS • Backbone.js
Unit Testing • HTML • CSS

AWARDS

President's Research Award 2015
International Exp. Award 2015, 2017
President Scholar of Distinction 2013

INTERESTS

Soccer • Running • Table Tennis
Economics • Reading Wikipedia

LINKS

GitHub:// @amaziying
LinkedIn:// in/amaziying

EXPERIENCE

COURSERA | SOFTWARE ENGINEERING INTERN
May - Sept 2017 | Mountain View, CA
- Proposed full-stack system design and implemented back-end to support multi-user simultaneous content editing, similar to a simplified Google Docs
- Designed and implemented an extension to a cache store system used to serve new performant API's designed to replace existing expensive high-fanout API's
- Refactored the cache refreshing pipeline using Scala abstractions to model the system expected behavior more closely and improve extensibility
- Implemented reusable UI components, notably nested list and payment form
- Technologies used: Scala, Kafka, React, SumoLogic

COURSERA | SOFTWARE ENGINEERING INTERN
Aug – Dec 2016 | Mountain View, CA
- Delivered, optimized, and heavily tested a critical service for aggregating and deriving learner enrollment states from many distributed sources in Scala
- Contributed to early design discussions on architecting enterprise back-end infrastructure and adapting with Coursera's existing learning platform
- Designed, built, launched, and iterated on internal tool UI using React for community operations team to support enterprise learners
- Technologies used: Scala, React

INKLING | SOFTWARE ENGINEERING INTERN
Jan – Apr 2016 | San Francisco, CA
- Delivered a new central authentication service for all Inkling applications by building a robust UI and integrating with authentication services
- Introduced custom brand styling for corporate customers by creating a robust system for serving custom post-compiled CSS style-sheets
- Technologies used: Backbone.js, Scala, Python, Bash

REFLEKTION | SOFTWARE ENGINEERING INTERN
May – Sept 2015 | San Mateo, CA
- Designed a denormalized Cassandra database schema to warehouse Google Analytics data, and created aggregation methods to support advanced queries
- Created analytics visualizations and reports using HighCharts and other front-end technologies on the dashboard product
- Introduced and spearheaded unit-testing framework across the Node.js back-end stack and wrote exemplary full-coverage unit tests
- Technologies used: AngularJS, Node.js, MongoDB, Cassandra, Jasmine

WATERLOO THEORETICAL NEUROSCIENCE | RESEARCH ASSIST.
Jan – Apr 2015 | Waterloo, ON
- Awarded President's Research scholarship under supervision from Dr. Chris Eliasmith to develop the Nengo neural simulator visualization and simulation UI using vanilla JavaScript and D3.js.

GENESYS | UI DEVELOPMENT INTERN
Aug – Dec 2014 | Toronto, ON
- Developed UI and introduced unit-testing framework into existing complex app

INDIGO | EMAIL PRODUCTION INTERN
Jan – Apr 2014 | Toronto, ON
- Developed email templates and improved workflow for email marketing