# **MOLLY CHEN**

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# **EDUCATION**

#### **DUKE UNIVERSITY**

BS IN COMPUTER SCIENCE Durham, NC | 2015 - 2019

## SKILLS

Azure DevOps, ASP.NET, C# Kusto, LINQ, AppInsights Vue, Angular, AWS Fullstack engineering

# MENTORSHIP

Duke Technology Scholars alumni Rewriting the Code network Microsoft Early in Career lead Microsoft Growth Groups member

# **COURSEWORK**

### **DUKE UNIVERSITY**

Intro to Algorithms
Discrete Math (TA)
Computer Architecture
Intro to Databases
Operating Systems
Computer Security
Information and the Internet
Human Computer Interaction

## UNIVERSITY OF EDINBURGH

Data Structures & Algorithms Software Testing Natural Language Processing Marketing Technical Products

# LINKS

### **GITHUB**

@mollymolichen

#### **LINKEDIN**

@mollymolichen

## **PORTFOLIO**

http://mollymolichen.github.io

## **EXPERIENCE**

## MICROSOFT SOFTWARE ENGINEER

AUG 2019 - PRESENT | REDMOND, WA

- Developed performant features on a custom, model-driven server-side framework that supports all of Microsoft's complex cataloguing data for commerce ingestion platform.
- Unify the first- and third-party ingestion experiences by migrating to partner hosted services.
- Write queries to monitor system health, respond to on-call duties, and ensure system is scalable during high traffic publishes.
- Collaborate with users across business tenants and designers to make UI controls more intuitive during data merging, differencing, and data publish.

### **QUANTWORKS** SOFTWARE DEVELOPMENT INTERN

JUNE 2018 - AUG 2018 | RESEARCH TRIANGLE PARK, NC

- Implemented early backend functionality for YouPlea, a case management system based on AWS (Lambda, DynamoDB, Cognito) to bring equity and efficiency to plea deals.
- Wrote 75% of prosecutor portal's REST API with AWS Lambda for our first client.
- Migrated middleware codebase into Lambdaless, wrote 100+ tests in Mocha/Chai.
- Refactored DynamoDB schema/JSON to reduce concurrent Lambda executions by 25%.

#### SAS INSTITUTE SOFTWARE DEVELOPMENT INTERN

MAY 2017 - AUG 2017 | RESEARCH TRIANGLE PARK, NC

- Added new features to Project Data Sphere, a cancer research platform that facilitates collaboration among researchers, using Spring MVC and Apache Tomcat.
- Improved interface and data on 50k+ patients by condensing statistics and admin dashboard into an easy-to-use format compatible across 200 data providers.
- Created new admin page with jQuery to edit system properties directly, eliminating need to restart Tomcat server or to risk manually editing the data.

## **DATA+** RESEARCH INTERN

MAY 2016 - AUG 2016 | DURHAM, NC

- Synthesized data from 10,000+ electronic health records from Duke University Medical Center to predict a patient's disease risk based on medical history.
- Created web app of interactive node network with patient demographics and disease risk using Gephi, SigmaJS, Apache Tomcat.
- Translated complex user queries into ICD-9 medical codes using natural language processing algorithms, drastically improving usability.

## **PROJECTS**

#### **ZINGO** LEAD DEVELOPER | JAN 2019 – JUN 2019

- Lead developer on a web app used by solo travelers to meet new people while abroad.
- Prototyped interfaces, iterated according to business needs, implemented functionality using Firebase, Vue, Vuetify.

## LEND A HAND CO-FOUNDER, SOFTWARE DEVELOPER | AUG 2014 - DEC 2017

- Chrome extension using NLTK sentiment analysis on social media corpus to detect whether a
  user is self-harming. Created at HackDuke 2017 (organizer for HD 16').
- Conducted beta testing with student ambassador from American Foundation for Suicide Prevention (AFSP) to improve usability.
- Raised \$1500 for AFSP via business sponsorship, \$1000 from fun run.

## TRANSLATE TRANSIT SOFTWARE DEVELOPER | AUG 2018 – PRESENT

- Mobile app that helps non-English speakers navigate a city by providing translations.
- Designing prototype in InVision, using Microsoft Text Translate API for functionality.