MOLLY CHEN

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mollymolichen.com

EDUCATION

DUKE UNIVERSITY
BS IN COMPUTER SCIENCE
Durham, NC | 2015 - 2019

UNIVERSITY OF EDINBURGH
COMPUTER SCIENCE
Edinburgh, Scotland | 2018

SKILLS

LANGUAGES
Java, HTML, CSS, JavaScript,
TypeScript, Python, C/C++

TOOLS
Spring MVC, Angular, Flask
MySQL, Postgres, DynamoDB
UNIX, Shell, Ubuntu
Git, JUnit, NLTK, Postman, SAS
AWS, Serverless, JSON, XML
Interests: Legal tech, health tech

COURSEWORK

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

UNIVERSITY OF EDINBURGH
Data Structures & Algorithms
Software Testing
Natural Language Processing

LINKS

GITHUB
@mollymolichen

LINKEDIN
@mollymolichen

WEBSITE
www.mollymolichen.com

EXPERIENCE

QUANTWORKS SOFTWARE DEVELOPMENT INTERN
JUNE 2018 – AUG 2018 | RESEARCH TRIANGLE PARK, NC

- Continued early development and product customization for YouPlea, an online portal for managing court orders and plea deals.
- Made YouPlea customizable by rerouting endpoints, letting each jurisdiction choose how pleas are validated and presented to the offender.
- Worked on backend, incorporating TypeScript with AWS system, Serverless, REST API, DynamoDB and S3 object retrieval into new codebase.

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.
- Improved interface and data on 50k+ patients by condensing statistics and XLS files into an easy-to-use format compatible across 200 data providers.
- Created interface using JavaScript to update system properties directly, eliminating the need to restart the server or manually enter data.

DATA+ ANALYTIC DEVELOPMENT INTERN
MAY 2016 – AUG 2016 | DURHAM, NC

- Developed global node network from 10,000+ electronic health records from Duke University Medical Center to predict disease risk based on patient medical history.
- Created network using visualization software (Gephi, SigmaJS) and integrated HTML/CSS/JavaScript.
- Translated complex user queries into ICD-9 medical codes using natural language processing algorithms, drastically improving usability.

PROJECTS/ADVOCACY

LEND A HAND CO-FOUNDER, SOFTWARE ENGINEER

- Chrome extension using NLTK sentiment analysis on social media corpus to detect whether a user is self-harming.
- 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.

PEER AVATAR COACHES RESEARCHER

- Bass Connections research project on the use of peer-led virtual avatars to improve access to mental health treatment.
- Beginning development off Sidekicks application to connect struggling college students to peer health coaches via mobile app.

MEMEMATCH SOFTWARE ENGINEER

- Dating app that matches users based on similar meme preferences.
- Used rank-based overlap (RBO) algorithms, Postgres and Flask, deployed with Heroku.