

MONICA IBRAHIM



Bothell, WA, 98012



425 233 2505



monicasolimanibrahim@gmail.com

WORK EXPERIENCE

Facebook, Seattle - Software Engineer

Jan '21

Facebook, Seattle - Software Engineer Intern (Open Source Tooling Team)

June '20 - Aug '20

- Helped unify the exchange of code reviews (CRs) between FB's internal CR tool and GitHub Pull Requests (PRs).
- Displayed inline comments from imported PRs internally in the relevant file change sets.
- Developed a component that displays a history of changes for imported and exported PRs.

Hack/PHP, JavaScript, React, Flow, GraphQL, Relay, HTML, CSS

Northeastern University - Teaching Assistant

Sept '19 - Apr '20

CS5002 Discrete Math | CS5004 OOD in Java

LANGUAGES AND TECHNOLOGIES

Languages: Java, JavaScript, Hack/PHP, TypeScript, C, Python, SQL, HTML, CSS

Tools & Frameworks: React, Redux, Angular, Flow, GraphQL, Relay, NodeJS, JPA, MySQL, MongoDB, mongoose, Rabbit MQ, Dynamo DB, HBase, AWS EMR, AWS S3, MapReduce, Apache Hadoop, Git, JUnit, Maven, VirtualBox, gdb

Operating Systems: Mac OS, Linux (Ubuntu), Windows

PROJECTS

Cost & Scalability Analysis: optimizing server QPS

Oct - Dec '20

- Built a multithreaded client to exert 128, 256 & 512 max concurrent requests (during peak phase) on the server.
- Measured & optimized server QPS given various configurations (e.g. adding a queue, relational vs. non-relational DB, etc.)

Distributed Systems, Java, AWS EC2, Rabbit MQ, AWS RDS, Dynamo DB, Swagger, Git

Career Search Forum (Web-App): <https://afternoon-sands-94723.herokuapp.com/>

Apr '20

JavaScript, React, Redux, NodeJS, MongoDB, mongoose, HTML, CSS, IntelliJ, Git

K-means Clustering: Movie Directors (from the IMDb movie dataset)

Apr '20

- Built a MapReduce job to group movie directors by some chosen traits and the ratings received for their movies.
- Preprocessed the raw dataset to flatten multi-dimensional vectors into single representative numbers.

Java, MapReduce, Distributed Systems, Apache Hadoop, Apache Pig, AWS EMR, AWS S3, Git

Web-Based Search Engine

Oct '19

- Wrote a graph-based web crawler to scrape Wikipedia pages and build an inverted index system (using tokenized terms).
- Built a document ranking system (given a query) to return snippets of text from each of the top K documents.

Python, VSCode, Regex, HTML

Distributed Movie Index and Search Engine

Mar - Apr '19

- Crawled ~50 files containing info on 5M movies and built a compact multi-layer index over the dataset.
- Built a query processor, an interactive CLI and a concurrent server using sockets to answer movie and search queries.

C, Vim, VirtualBox, gdb, Git, Linux (Ubuntu)

EDUCATION

MS in Computer Science, Northeastern University, GPA: 3.97/4.0

Jan '19 - Dec '20

Algorithms (C), Advanced Algorithms, Computer Systems (C), Discrete Math, OOD (Java), Databases, Information Retrieval, Web development, Parallel Data Processing, Distributed Systems, Data Mining

Full Time User Experience Design Program, RED Academy

Jul - Sept '17

BSc, Cognitive Systems, Cognition and Brain Opt, UBC Vancouver, GPA: 3.5/4.33

May '17