### Krit Goyal

Boston, MA | (857) 400-6135 | krit.goyal95@gmail.com | www.kritgoyal.com

#### **EDUCATION**

Northeastern University, Boston, MA

Sept. 2018 - Present

**Khoury College of Computer and Information Sciences** 

Expected graduation: Dec 2020

Candidate for Master of Science in Computer Science, GPA: 4.0./4.0

Related courses: Large-Scale Parallel Data Processing, Data Mining Techniques, Information Retrieval, Game AI, Programming Design Paradigm

Birla Institute of Technology and Science(BITS) Pilani, Rajasthan, India

May 2017

Bachelor of Engineering in Electrical and Electronics Engineering, GPA: 7.78/10

Related courses: Machine Learning, Object Oriented Programming, Data Structures and Algorithms, Operating

Systems, Micro-processors, Digital Design, Foundations of Software Engg.

# TECHNICAL KNOWLEDGE

Scripting: Kotlin, Go, Java, Python, C#, Scala

**Web technologies:** React.js, Typescript, Vue.js, Node,js, Express.js, PHP7 **Databases:** MySQL 5.7 & 8, DynamoDB, Firebase, MongoDB, sqlite3

**Distributed Systems:** Hadoop Map-Reduce, Spark

Others: AWS, AWS CDK, Docker, Git, Firebase

#### WORK EXPERIENCE

Amazon, Santa Barbara, CA

SDE, Intern, Graphiq Platform Team

June 2020 - Aug 2020

- Built the new production ready background job scheduler for Graphiq using AWS CDK
- Enforced multi-layered security including VPCs, private subnets, IAM Auth and encryption
- Wrote unit and integration tests with near 100% code coverage
- · Compiled extensive documentation and Runbook

# UpToDate, Wolters Kluwer, Waltham, MA

Web Developer, Intern, CORE team

Jan 2020 - May 2020

- Worked in the core team on tickets including UI/UX enhancements(angular.js, jsp) and backend micro services (Java, Springboot)
- With 2 other interns, built a much needed data migration tool between databases(stage, prod, dev)
- Used node.js and express.js for backend, vue.js for frontend
- Added comprehensive documentation and unit tests
- Followed bi-weekly agile scrum-ban methodology
- Dockerized the core UpToDate application and compiled setup instructions document

# mHealth Research Group, Boston, MA

Graduate Research Assistant, Android and Machine Learning Engineer

Oct 2018 - Dec 2019

- In a team of 5, developed intelligent Android apps for phone and smartwatch to collect data, analyze and constructively affect user behavior of over 200 participants for an NIH funded study
- Used self-report methods, and device sensors like accelerometer and heart rate monitor for 24x7 data collection
- Utilized Firebase for database, storage, authentication, and app crash analysis, involving 10-20 GB of data per day
- Leveraged machine learning for user data analysis and build context-sensitivity, DBSCAN for location clustering
- Reduced data storage and transfer over network by 65% using differential encoding

#### PROJECTS AND ACTIVITIES

#### Browser Automation, WorkerB

Jan 2020 - April 2020

- <a href="https://docs.workerb.io/">https://docs.workerb.io/</a>
- Docker containerized server using Golang, Dgraph, sqlite3 and MySQL db, redis caching, leader election **Business management for MSMEs,** YDlay.shop April 2020 Present
  - https://play.google.com/store/apps/details?id=com.tiklyo.ydlay
  - Used Kotlin for frontend, Golang for backend, sqlite3 and MySQL db with redis caching. Deployed on AWS

#### Optimizing compiler inlining with Machine Learning, DMT, NEU

June - Aug 2019

• Achieved 18.8% speedup by modifying NEAT-python to model and explore topologies for deep Neural Networks, execute our modified Glasgow Haskell Compiler(GHC), and benchmark using NoFib