Akib Maredia

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Education

UNIVERSITY OF FLORIDA | Gainesville, FL — Aug. 2019 - Dec. 2020
Master of Science in Computer Science | GPA: 3.79

UNIVERSITY OF MUMBAI | Mumbai, India — Aug. 2015 - May 2019
Bachelor of Engineering in Computer Engineering | GPA: 8.07

Experience

AMAZON.COM | Seattle, WA — May 2020 - Jul. 2020
Software Development Engineering Intern

- Part of the team that provided tools for vendors, sellers and internal employees of Amazon.com
- Worked on a project to provide training and resource materials for user based on the platform they are using to improve user experience
- This project also involved creating settings for users to control the level of automation provided by automated services which reduced average time to post content by **20** seconds
- Created React components, connected them to Redux store and created url endpoints for API calls

Skills

LANGUAGES
Java • Python • CSS • HTML • SQL • JavaScript • F# • TypeScript

FRAMEWORKS
Node.js • React • Redux • Java SpringBoot

DATABASES
MongoDB • MSSQL • Oracle DB

SOFTWARE / VERSION CONTROL
Terminal • Git

METHODOLOGIES / PRACTICES
Scrum • Test Driven Development

CLOUD
Heroku

Projects

TWITTER SIMULATOR | github.com/akibmaredia/twitter-simulator

- Simulated a client server model using Akka Actor model with functionalities like registration, tweet, follow, mentions, hashtags, unfollow, live feed and search. Also simulated online and offline users.
- Achieved scalability and were able to support **10K** simultaneous users with **217** tweets per second
- **Second part** of this project designed and developed a web application supporting the same functionalities using REST API back-end. Implemented websocket protocol for delivering live feed between clients-server and making new users available for following.
  F#, Akka Actor Model, .Net Core, Suave, HTML, CSS, JavaScript, JQuery

PASTRY - P2P ROUTING | github.com/akibmaredia/pastry-protocol

- Designed and implemented Pastry - a distributed, scalable object location and routing substrate which supports data sharing across wide peer-to-peer applications
- Performed load testing with **262K** peers participating in the network and achieved an average of **7 hops** per transmission to reach the destination
  F#, Akka Actor Model, .Net Core

RISING CITY | github.com/akibmaredia/risingCity

- Implemented Red Black Tree and Min heap data structures to track constructions of buildings
- Min heap was used to store the buildings ordered by execution time and red black tree was used to store building ordered by building number
- Developed synchronization and priority scheduling logic
  Java

DATABASE SYSTEM

- This project involved developing an in-memory database system in C++
- Implemented Heap and Sorted file organization to store and manage database records
- Implemented database query commands like: CreateTable, Insert, Drop, Select, Where, GroupBy and Sum
  C++