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

- Created REST API endpoints in Java Spring for a particular setting and corresponding React component which accelerated a certain workflow by approximately **10 seconds**
- Handled application side effects including and not limited to asynchronous activities API calls through Redux sagas
- Added unit tests for the Redux sagas and performed manual tests on React components and sagas.
- Reorganized existing React components and housed them under a sub-nav bar component for better user reachability depending on user subscription hence improving user experience.
  Java SpringBoot, TypeScript, React JS, Redux

Skills

Languages : Java • Python • SQL • JavaScript • HTML/CSS • TypeScript
Frameworks: React • Redux • Node.js • Flask • Java Spring Boot
Databases : MSSQL • MongoDB • Oracle SQL Server, • Postgres
Developer Tools : Git
Methodologies/Practices : Scrum • Test Driven Development • API Driven Development
Cloud : Heroku • AWS

Projects

TWITTER SIMULATOR | GITHUB.COM/AKIBMAREDIA/TWITTER-SIMULATOR

- Simulated an auto-scalable Twitter using Akka Actor model with functionalities like registration, tweet, follow, mentions, hashtags, unfollow, live feed, and search.
- Simulation supported **10K** simultaneous users with **217** tweets per second
- **Second part** of this project involved designing and developing 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

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 the red-black tree was used to store building ordered by building number
- Developed synchronization between the two data structures and priority scheduling logic
  Java

MOVIE TREND ANALYSIS

- Followed an entire System Development Life Cycle.
- Handled and analyzed **354K tuples** of movie data to find trends w.r.t genres, budget, profit, ratings, etc
- Displayed analyzed trends in the form of graphs, charts, and histograms using a chart library
  Chart.js, JavaScript, Java SpringBoot, SQL, Oracle SQL Developer