Rama Narasimhan M

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EDUCATION:

Master of Computer Science   Aug 2022-May 2024 (Anticipated)
Arizona State University, Tempe, USA.   CGPA: 3.9/4

Bachelor of Technology, Computer Science & Engineering   Jun 2014-May 2018
SASTRA University, Thanjavur, India.   CGPA: 8/10

TECHNICAL SKILLS:

Languages: C++ , Java , Python, Javascript, Typescript.
Web Technologies: React.js, Angular, Node.js, Express.js, HTML5, CSS, jQuery, AWS S3, EC2.
Tools and Frameworks: React-Native, Redux, Jest, Docker, git, perforce.
Databases: PostgreSQL, MySQL, MongoDB.

EXPERIENCE:

Senior Software Engineer, Divisions Maintenance Group, Bangalore, India   Jan 2022-July 2022
- Developed the UX and application logic of the DMG Pro V2 mobile app, with enhancements including faster render time and improved UX using React-Native, Redux, styled-components, React-Navigation.

Software Development Engineer in Test-1, Amazon, Chennai, India   Aug 2020-Dec 2021
- Led the migration of the Kindle device settings and Out-of-box experience applications from Java to React Native which included re-designing the application architecture to interact with various native applications like Registration, Bluetooth and Wi-Fi and Quick-Settings, resulting in 40% faster render time and 50% faster user onboarding.
- Designed and implemented the Notebook Library application of Kindle Scribe, which involved using React Native for UI and C++ for native modules, allowing users to create notes and organize them.
- Developed an e-Book summarization widget as part of the Kindle hackathon at Amazon. It presents a summary of the contents of the pages of a book that the user has read so far, using an online text summarization model (Pegasus) API, so the users can recall easier.

Associate Software Engineer, NortonLifeLock, Chennai, India   Jan 2018-Jul 2020
- Developed a tool in C++ that monitors the performance of Norton Antivirus and logs anomalies during automated test runs, reducing the manual testing and debugging effort by 90%. Innovated a novel mechanism to collect debug information automatically during memory leaks using Microsoft AppVerifier and JS Debugger, helping developers to debug the leaks quicker.
- Developed proof-of-concept integrations of Dropbox and Gmail with Norton CloudScan API for scanning user data for viruses and spam, involving the development of an OAuth 2.0 authentication client implemented using Node.js and Express.js.
- Developed a dashboard which displays various metrics about the automation test runs on Norton Antivirus for an overall summary of the test results, using Angular, Node.js, Express.js and MongoDB.
- Reduced the manual-testing effort of Norton Antivirus by 90% by writing libraries and scripts in Python to automate test cases for the antivirus features: Norton-Power-Eraser, Auto-protect, Scanning, and Exclusion.

Undergraduate developer Intern , OneWhistle Inc, Chennai, India   Apr 2017-May 2017
- Built a high-performance REST API that delivers push notifications and alerts to nearby producers and consumers, allowing them to receive assistance, services, or emergency SOS using Node.js, Express.js, MongoDB, AWS S3.

GRADUATE PROJECTS:

- Developed a React Native/Django mobile app for intelligent driving assistance, including location-based music recommendations, sensor-driven mileage tracking, and real-time collision detection with emergency contact alerts.
- Developed a website for musicians to register and be requested to perform for events by organizers, using MERN stack (React.js, Redux, react-router-dom, styled-components, Node.js, Express.js, and MongoDB).
  Link: https://booking-benefit-live-client.onrender.com/
- Developed a web application that crawls dark web marketplaces, scrapes and indexes the data and can be queried from the front-end, using HTML, CSS, Javascript, Django, Beautifulsoup, Apache Solr.
- Developed a mobile application for monitoring heart rate and respiratory rate using the smartphone camera and accelerometer sensors in React Native.
- Implemented the code for key operations of a Google Bigtable-like DBMS like Record insertion, sorting, Row join and query by enhancing the minibase code in Java. Implemented and compared different indexing strategies utilizing B+ trees for maximizing the query performance.

ACTIVITIES AND ACHIEVEMENTS:

- Mentored a team of interns at NortonLifeLock, enabling them to get acquainted with the Automation testing library quickly and deliver results with quality.
- Represented SASTRA university at the ACM Inter-Collegiate Programming Contest regionals for 2 years (Dec 2016 and 2017).