Rama Narasimhan Magesh

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EDUCATION:

Master of Computer Science

May 2024 (Anticipated)

Arizona State University, Tempe, USA.

CGPA 4/4

Relevant Coursework: Database Management Systems Implementation, Software Security, Applied Cryptography.

Bachelor of Technology, Computer Science & Engineering

May 2018

SASTRA University, Thanjavur, India.

CGPA 8.03/10

EXPERIENCE:

Divisions Maintenance Group, Bangalore, India: Senior Software Engineer

Jan 2022-July 2022

- Designed and developed the UX of the DMG Pro mobile application for Android and iOS by creating the User Interfaces and
 its underlying business logic, including navigation and communication between the screens, API calls to the backend, and
 writing Unit Tests.
- As part of the DMG Pro application UX development, re-designed and developed the UX of the business-critical photo-snap module of the DMG Pro mobile application, and made it offline-compatible, enabling technicians to take photos in places with low internet connectivity and upload them later.

Technologies used: React-Native, Redux, <u>styled-components</u>, <u>React-Navigation</u>.

Amazon, Chennai, India: Software Development Engineer in Test-1 (Software Development Engineer – 1) Aug 2020-Dec 2021

- Designed and developed the business logic and UX of the refreshed Kindle Out-of-box experience (OOBE), leading to a 50% reduction in user onboarding time. Responsibilities included designing the logic and communication between the OOBE application and various Kindle services like Quick-Settings, WiFi, Sign-In, GoodReads and developing the necessary User Interfaces along with Unit Tests.
- Improved the render time of the Sign-In and Quick-Settings modules of Kindle by 80%. This involved using tools like React Profiler to identify bottlenecks and optimize them, pre-fetching and caching the required information from the back-end.
- Developed a text summarization application, as part of the Kindle hackathon, which leverages an online text summarization model (<u>Pegasus</u>) to summarize the contents of the pages that the user has read so far, thereby enabling them to quickly glance at it when they return to that book.

Technologies used: React-Native, C++, Cmake.

NortonLifeLock, Chennai, India: Associate Software Engineer

Jul 2018-Jul 2020

- Improved the quality of testing of Norton Antivirus by developing the Health-Monitor tool which leverages Microsoft SysInternals utilities for running longevity-test on Norton Antivirus during manual tests or automated test runs.
 - This detects crashes, hangs, and monitors the scan schedule and resource utilization (CPU, memory, and antivirus definitions) and logs any anomalies onto a Kibana dashboard using FileBeat, where the performance data can be queried over any specified period of time.
 - Implemented a novel mechanism to collect debug information automatically during memory leaks that happen during the automated test runs by using the Microsoft AppVerifier tool and JS Debugger scripting, which reduced the developers' effort to debug and fix the leaks faster.

Technologies used: Windows Sysinternals, JS Debugger scripting, C++, Windows Component Object Model, Filebeat, Kibana.

NortonLifeLock, Chennai, India: Associate Software Engineer Intern

Jan 2018-Jun 2018

- Reduced the manual-testing effort of Norton Antivirus by 90% by writing libraries and scripts in IronPython to automate test cases for the antivirus features: Norton-Power-Eraser, Auto-protect, Scanning, and Exclusion.
- Developed the backend of an internal website that displays images, URLs, and videos in a slideshow on TV screens in the
 office using PHP. The user can upload the media and choose the media and display order and the TVs to display on.
 Technologies used: PHP, HTML, JavaScript, jQuery.

TECHNICAL SKILLS:

Languages: C++, JavaScript, Python.

Web Technologies: HTML, CSS, jQuery, React.js, Node.js, Angular.

Databases: MySQL, MongoDB.

Version Control/ Build Tools: Git, Perforce.

Tools and Frameworks: React-Native, REST, Redux, React-Navigation, CMake, Filebeat, Kibana, Jest, Docker.

ACTIVITIES AND ACHIEVEMENTS:

- Represented SASTRA university at the ACM ICPC Kolkata regionals for 2 years (Dec 2016 and 2017).
- Active participant in Algorithm contests conducted by online judges. User Profiles : <u>Codechef Hackerrank Codeforces</u>.
- Top 1000 in Google Kickstart in 2016, Round B, and in 2017, Round G (username: Rama4).