VARUN BHARATHI JAYAKUMAR

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EDUCATIONS

Northeastern University, Boston, MA   Expected May 2024
Master of Science in Software Engineering Systems;   GPA: 3.92
Relevant Coursework: Program Structure and Algorithms, Web Design and User Experience, Adv. Computing Infrastructure

Vellore Institute of Technology, Vellore, India   Apr 2018 - May 2022
Bachelor of technology in Electronics and Communication Engineering;   GPA: 3.65

TECHNICAL SKILLS

Programming Languages: Python, Java, Groovy, JavaScript (ES6), C++, C

Frontend/Backend Technologies: ReactJS, NextJS, Grails, Redux, Node.js, Express.js, MaterialUI, Bootstrap 5.0

Cloud and Monitoring: AWS - S3, EC2, CloudFront, Elastic Beanstalk, CodeDeploy, Linux, Docker, Kibana, Sentry, Log Rocket

Databases and Version Control: MySQL (SQL database), MongoDB (NoSQL database), Google Firestore; Git, GitLab, GraphQL

WORK EXPERIENCE

SOFTWARE ENGINEERING CO-OP (FULL STACK), Boston, MA   June 2023 - Dec 2023
Cohere Health

- **Built healthcare product** that simplifies process of **gathering prior authorization requests** from healthcare providers and tracking progress of requests. **customizable** to meet specific needs of **different health insurance companies** (payers) with **React.js**, **Grails**

- Established testing framework for Python-based PDF generation repository and implemented **GitHub actions** to test Pull Requests (PRs) via **CI workflow**, resulting in a 90% decrease in failed PDF generation

- Automated daily data backfill process in the database through **scheduled job** in Grails, transforming a cumbersome week-long task of handling 250,000 records into a streamlined daily operation, leading to **85% improvement in completion time**

- Identified and **resolved discrepancies** within **Docker image environments** to rectify text misalignments and bleeding in generated PDFs, resulting in 95% reduction in visual inconsistencies between local and deployed environments

- Designed and **constructed** comprehensive **Kibana dashboard** tailored to monitor scheduled jobs, effectively reducing issue resolution time by 40% and enhancing the troubleshooting capabilities

- Proposed and **implemented cross-team process** to remove deprecated feature flags leading to **removal of 60% outdated feature flags** across teams, resulting in significantly cleaner codebase, improving overall system agility, and reducing technical debt

- **Addressed mission-critical** system bug by **deploying hot fix**, safeguarding operational disruptions and potentially missing turn around window, ensuring seamless operation

- Contributed to **backend** framework **version migration** from **Grails 4 to Grails 5**, significantly reducing compatibility issues by 30%, thereby easing transition and enabling a smoother traffic redirection

- Implemented **integration, unit tests** for frontend and backend features using **Jest** and **spock**, resulting 70% reduction system bugs

WEB DEVELOPER INTERN, Bengaluru, India   Apr 2021 - Jul 2021
Waveus Network

- Designed and **developed responsive front-end** in multiple client projects using PHP based Yii2 framework improving usability and decreasing UI (user interface) feature delivery time by **~20 percent**

- Implemented **lazy loading**, **static assets caching** and optimized HTTP requests to improve webpage performance by **23%**

- Integrated website performance monitoring tools (**Google PageSpeed** Insights, Lighthouse) to enable webpage performance logging

ACADEMIC PROJECTS

MEALTRAIN - Full Stack web Application, *Northeastern University*   Website | GitHub   Dec 2022

- Built client application with **NextJS.** Implemented features to view menu of restaurants, order food through cash on delivery or **payment gateway** and track order status. Utilized **server-side rendering** to improve search engine optimization by 20%

- Built second client app for order and menu management, boosting performance by 10% with Amazon S3 image storage

- Developed backend **REST** API with **NodeJS, MongoDB** implementing **JWT** token for authentication. Thus, making API secure

CERTIFICATION AND PUBLICATION

- AWS certified cloud practitioner (expires August 2024)