Nivishree Palvannan

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PROFESSIONAL SUMMARY

Hi, I'm Nivishree Palvannan and I bring enthusiasm and joy to every project I dive into. My journey spans creating dynamic UIs, developing solid backend solutions, and conducting thorough end-to-end testing, along with managing deployments. With a strong background in both front-end and backend technologies, I'm passionate about using technology to address real-world challenges. Always excited to learn and take on new projects—let's connect and build something extraordinary together!

EDUCATION

Master of Science in Computer Science   **August 2021 - May 2023**

Virginia Polytechnic Institute and State University Graduate School, Blacksburg, Virginia, USA

Bachelor of Engineering, Electronics and Communication Engineering   **May 2019**

PSG College of Technology, Coimbatore, India

PROFESSIONAL EXPERIENCE

Software Engineer - II, TORC Robotics   **July 2023 - Present**
- Designed and developed a web-based mapping service featuring route planning and live traffic updates.
- Led the migration of legacy systems to a microservices architecture and established a rigorous testing framework.
- Developed remote assistance and real-time truck monitoring system, enhancing user experience and addressing issues with on-call support.

Co-Op Full Stack Engineer, TORC Robotics   **May 2022 - Aug 2022**
- Collaborated with the mission control team to develop a user interface for advanced tracking of autonomous vehicles.
- Designed and deployed an alert system for monitoring video feeds and tracking real-time viewership in an autonomous system.

Information Technology Intern, Virginia Tech Foundation   **October 2021 - May 2022**
- Owned the management and maintenance of the front-end for Drupal sites associated with the VT Foundation Dashboard.
- Designed a logo for official use by the VT Foundation.

Software Engineer, Philips Healthcare, Bangalore, India   **June 2019 – August 2021**
- Developed a comprehensive system for managing organizations, patients, and planning functionalities in Pinnacle.
- Conducted security and code integrity scans and automated high-transaction web applications.
- Containerized microservices with Docker, orchestrated deployments with Kubernetes, and resolved CI/CD issues with Jenkins.

Software Development Intern, Philips Healthcare, Bangalore, India   **January 2019 – June 2019**
- Introduced code quality checks for Philips Pinnacle, a radiation treatment planning software.
- Developed a consolidated database using Postgresql between workflow manager and patient monitoring system.

TECHNICAL SKILLS AND INTERESTS

Languages: Javascript, Typescript, Python, Java
Frameworks: Angular, NodeJS, ReactJs, VueJS, Flask, FastApi
Cloud/Databases: MySQL, NoSQL, Athena, DynamoDB, PostgresSQL, AWS Lambda, AWS CloudWatch, AWS Kinesis
Testing: Selenium, JUnit, PyTest, Playwright, Gherkin, Squish
Security & Performance: TICS, Nessus, Blackduck, JMeter
Technologies/Tools: Git, NPM, React Developer Tools, Node.js, Postman, AWS, AJAX, JSON, RESTful APIs, Jenkins, Docker, Kubernetes, Drupal, GIMP, Unity, Redux, HTML, CSS, Material UI, Figma, Terraform, Datadog

PROJECTS

Wearable Inspection and Report Management System (WIRMS)
- Designed UX for an AR application in partnership with VDOT.
- Enabled bridge inspectors to generate on-site inspection reports with enhanced tools.

Food Delivery Application
- Developed an Android app connecting passengers with various restaurants on the Indian Rail network.
- Managed the full fulfillment cycle, from ordering and delivery to customer feedback and reconciliation.

SuggestionBot
- Revitalized code quality by actively participating in peer code reviews and leveraging GitHub's suggested changes.
- Developed "Suggestion Bot" to automate codebase reviews, improving response times and delivering targeted feedback for pull-based projects.

Reverse Kernel Debugging
- Developed an automatic debugging framework for identifying kernel crash causes using Intel Processor Tracing.
- Created a user-friendly interface with ReactJS to display diagnostic results from the reverse diagnostic tool.

PUBLICATIONS

- **Nivishree Palvannan**, Dr. Chris Brown. "Suggestion Bot: Analyzing the Impact of Automated Suggested Changes on Code Reviews", 2023 IEEE/ACM 5th International Workshop on Bots in Software Engineering (BotSE)