NIKIL NANDHA SELVARAJ

nikilselvaraj003@gmail.com | LinkedIn | GitHub | +1 (469) 487-1321 | Arlington , TX

Adept computer science professional with over 3 years of expertise in full stack software development for business intelligence application, offering proactive problem-solving, presentation, and interpersonal skills in accordance with industry best practices.

SKILLS

Languages: JavaScript, Python, Java, C, C++
Web Technologies: HTML, CSS, React.js, Angular, Node.js, PHP, RESTful Web Services
Mobile Development: React Native
Databases: SQL Server, MySQL, MongoDB
Tools & Workflow: Git, Jira, Postman, Agile-Scrum practices, CI/CD (Jenkins, Docker)

EDUCATION

UNIVERSITY OF TEXAS AT ARLINGTON   **Aug 2021 – Dec 2023**
Master of Science: **Computer Science**   Current GPA – 4.0 / 4.0
- Machine Learning, Data Structures & Algorithms, Web Data Management, Software Engineering Management.
- Received prestigious "Lone Star State Scholarship" from Department of Computer Science & Engineering

ANNA UNIVERSITY   **Aug 2015 – May 2019**
Bachelor of Engineering: **Computer Science and Engineering**
- Algorithm Design and Analysis, Object-oriented Design, Operating Systems, Software Engineering.

WORK EXPERIENCE

Software Development Engineer Intern at Amazon, Seattle – WA   **Aug 2022 – Dec 2022**
- Designed and implemented an efficient error logging mechanism for Amazon's network switch devices, streamlining the failure identification, triage and remediation process for over 10,000 devices.
- Extensively analyzed the custom Linux OS boot process for switch devices and seamlessly integrated the changes during hardware initialization performed by the open-source bootloader U-boot.
- Collaborated with cross-functional teams to resolve technical challenges and ensure system reliability.
- Developed unit tests and automated regression tests for error logging, ensuring high software quality.
- Presented project updates to stakeholders, receiving positive feedback on its effectiveness and scalability.

Graduate Teaching Assistant at The University of Texas at Arlington   **Jan 2022 – Current**
- Assisted as Graduate Teaching Assistant for the Marketing and Management Department, overseeing their website and reducing technical errors, improving content consistency.
- Tasks included assisting professors on technical concerns, updating the marketing website using Sitecore, integrating video editing, and managing hardware and desktop setup.

Associate Software Engineer at Ducen, Chennai – India   **Feb 2019 – July 2021**
- Contributed to the development of revamping User Interface, Backend services, and API endpoints for the Business Intelligence application "Analance" using Angular, C#, .NET, and MongoDB.
- Optimized data visualization, reducing page rendering latency by 28% through lazy loading of charts using d3.js.
- Enhanced user experience with new themes and chart types, attracting 2 new major customers including "Bell Canada".
- Achieved a 40% reduction in the received application size through web service optimization, utilizing Brotli .NET compression for faster build file transfers during updates.

PROJECTS

Real-time File Sharing and Synchronization Platform (React.js, Java, Maven, Springboot**):**
- Developed a website for multithreaded file sharing, upload, download, real-time synchronization, and collaborative file editing and deletion. Used "file.WatchService" API to keep changes in sync with cloud and on-device files.
- Implemented a user-friendly React.js frontend to facilitate seamless file operations, collaboration, and management.

SecureGroup Chat App (*React Native, Firebase*, *Google Fused Location Provider API***):**
- Designed and developed a cross-platform group messaging app for iOS and Android, prioritizing privacy and decluttered communication. Implemented end-to-end encryption, ensuring secure messaging and file sharing.
- The app gained a user base over 200 with a 4.5-star rating on app stores.

Audio fingerprinting based Intelligent Media Content Identifier (Java, XML and Firebase**):**
- Developed an Android application that accurately recognizes media content from audio sources and displays metadata.
- Implemented efficient audio processing and fingerprinting algorithm, resulting in a 20% increase in recognition accuracy resulting in faster response over large dataset.

Career Fair Recruitment App (Java, XML and Firebase**):**
- Created an Android app to streamline career fair and recruitment processes for an educational institution.
- Introduced a user-friendly dashboard for recruiters, reducing recruitment time by 30%. Integrated video interview scheduling, resulting in an overall increase in candidate engagement.