Baalavignesh Arunachalam (He/him)

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PROFESSIONAL SUMMARY

Full-stack developer with professional experience in cloud computing, web, and mobile development. Proficient in designing scalable solutions and collaborating effectively within teams. Accomplished hackathon participant with multiple wins, showcasing innovation and technical expertise.

EDUCATION

George Mason University Virginia, United States
Master of Science in Computer Science; GPA: 4.0 August 2024 - Present
Relevant Coursework: Analysis of Algorithm, Data Mining, Database Systems, Mobile Immersive Computing, Secure Software Systems, Component-Based Software Development.

PSG College of Technology Coimbatore, India
5 years integrated M.Sc. Software Systems; CGPA: 7.8 June 2018 - May 2023

TECHNICAL SKILLS

Technologies: TypeScript, JavaScript, AWS, Python, C, C++
Skills: React, Next.js, Node.js, Flutter, Firebase, OpenAI, SQL, Angular

PROFESSIONAL EXPERIENCE

Presidio, Inc. *March 2023 – July 2024*
Associate Software Engineer

- **Developed** internal learning platforms and retro tools using **React**, designing a scalable architecture on **AWS** with a serverless approach utilizing **Lambda**, **API Gateway**, **Cognito**, and **RDS** with **MySQL** for seamless data management.
- Engineered an Awards Maintenance platform using **Azure AD**, React, and **Node.js** with a Microservices architecture. Implemented a **CI/CD pipeline** with GitLab, streamlining the development process and ensuring faster delivery.
- Contributed to client projects utilizing **WebRTC**, **React Native**, Microsoft Azure, and Docker, delivering robust solutions for real-time communication and cross-platform mobile development.

Toast, Inc. *June 2022 – July 2022*
Software Developer Intern

- Managed several gigabytes of invoice bills using **DynamoDB** with **Lambda** for a serverless solution with authorizers for the REST API through **API Gateway** for efficient data retrieval and processing.
- Optimized data scans by implementing Local and Global Secondary indexes, reducing overall scan times. Applied SOLID principles to enhance code maintainability.

Zoho Corporation *May 2021 – November 2021*
Software Developer Intern

- **Developed** an **Angular** application with **Ngrx** state management, implementing organizational authentication for a secure internal voting system, improving user access control and experience.
- **Built** an **Impact Analyzer** tool using **Node.js** and **AST Tree Traversal**, enabling efficient tracking and debugging of changes in project files and dependencies, reducing the overall debugging time.

PROJECTS

SkillAgent
Personalized Learning Platform for Workforce Development

- Created a personalized learning platform leveraging **OpenAI** to provide customized skill development plans and AI tutoring, utilizing **Vite.js**, **Tailwind CSS**, **Vanta.js**, and **Redux Toolkit** for a seamless and interactive user experience.
- Integrated **OpenAI's Assistant** and **Threads** features with a Node.js backend following the **MVC architecture**, utilizing Axios for API communication and **Firebase Firestore** for secure data storage.

MiResume
AI-Powered Resume Builder for Tailored Job Applications

- **Developed** a platform using **Microsoft Azure AI** to generate personalized resumes in under a minute, leveraging **LaTeX** for consistent, professional formatting.
- **Built** with **React**, **Vite.js**, and **Tailwind CSS** for a responsive, user-friendly interface, ensuring secure data management through **Azure Cosmos DB**.

CERTIFICATION & ACHIEVEMENTS

- **AWS Certified Solution Architect and Cloud Practitioner** issued by Amazon Web Services Training and Certification
- **Won Best Prototype Award** in **Story3 Hackathon** conducted by **HackerEarth**
- **Awarded** with **Honorable Mention** in **DataPalooza Hackathon** conducted by **DevPost**