

Baalavignesh Arunachalam (He/him)

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SUMMARY

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

EDUCATION

George Mason University

Master of Science in Computer Science GPA: 4.0

Virginia, United States

August 2024 -Expected May 2026

Relevant Coursework: Theory and Application of Data Mining, Database Systems, Component-Based Software Development, Mobile Immersive Computing, Secure Software Systems.

PSG College of Technology

5 years integrated Master of Science in Software Systems

Coimbatore, India

June 2018 - May 2023

SKILLS

Programming Languages: TypeScript, Python, JavaScript, HTML, CSS, C#, C, C++

Technologies: React, Next.js, Node.js, AWS, Docker, Kubernetes, SQL, FastAPI, NumPy, Pandas, MongoDB, Angular

PROFESSIONAL EXPERIENCE

Presidio, Inc.

Associate Software Engineer

March 2023 – July 2024

- 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 Award Maintenance platform using Azure AD, React, Lambda, 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.

Software Developer Intern

June 2022 – July 2022

- 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 by 40%. Applied SOLID principles to enhance code maintainability.

Zoho Corporation

Software Developer Intern

May 2021 – November 2021

- Developed an Angular application with NgRx store for 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

HealthBridge

Bridging Healthcare Language Barriers with Intelligent Telemedicine

- Developed an AI-powered telemedicine platform that eliminates language barriers using OpenAI's voice-to-text technology, AWS Translate for multilingual communication, and the Hugging Face model for symptom analysis.
- Created a comprehensive solution with React and Tailwind CSS frontend, FastAPI backend, and DynamoDB database, enabling seamless doctor matching, and culturally aware healthcare delivery for diverse patient populations.

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.

CERTIFICATION & ACHIEVEMENTS

- AWS Certified Solution Architect and Cloud Practitioner** - Amazon Web Services
- Kubernetes for the Absolute Beginners** - KodeKloud
- Best Prototype Award - Story3 Hackathon**, HackerEarth
- Honorable Mention - DataPalooza Hackathon**, DevPost