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   Virginia, United States
Master of Science in Computer Science GPA: 3.78.   *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   Coimbatore, India
5 years integrated Master of Science in Software Systems   *June 2018 - May 2023*

SKILLS

Programming Languages: TypeScript, Python, Swift, JavaScript, HTML, CSS, C#, C, C++
Technologies: React, Next.js, Node.js, AWS, Terraform, Docker, Kubernetes, SQL, NumPy, Pandas

PROFESSIONAL EXPERIENCE

Motate   *May 2025 – Present*
Software Developer Intern
- Building a serverless multilingual content platform using AWS Lambda/API Gateway, enabling translations across multiple languages with automated scaling using AWS Lambda and API Gateway.
- Automated AWS environments via Terraform/GitHub Actions and optimized DynamoDB schemas with secondary indexes, improving query speeds while maintaining SOLID-coded Lambdas.

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 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 for accessibility, enabling seamless interaction for hearing-impaired users, using WebRTC, React, and Microsoft Azure, delivering robust solutions for web 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 by 40%. Applied SOLID principles to enhance code maintainability.

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