

CATHERINE JOHNSON

SOFTWARE ENGINEER & AI RESEARCHER

PROFESSIONAL SUMMARY

Software Engineer & AI Researcher with 11 years full-stack development and AWS cloud expertise. Principal Consultant at Innovation Eco Solutions building enterprise applications with focus on AI/ML research and implementation. AWS multi-certified, expert in Angular, React, Node, Python, machine learning frameworks, and cloud architecture. Proven leader managing engineering teams with performance awards. Specialises in scalable enterprise solutions, AI/ML research integration, and modernising applications to AWS infrastructure with cutting-edge AI capabilities.

CERTIFICATIONS



KEY TECHNICAL SKILLS

- **Frontend Development:** Angular (11 years), React (9 years), HTML5, CSS3, SCSS, Bootstrap, Styled Components, micro frontends, typescript
- **Backend Development:** Node (11 years), Express, NestJS, Python, Flask API, micro services, type-safe APIs
- **State Management:** RxJS, NgRx, Redux
- **Authentication & Security:** JWT, OAuth
- **Databases & Data Storage:** SQL, MongoDB, Apache Cassandra, Redis
- **AI:** NLP, ML, LLM, ML
- **Message Queuing & Streaming:** Kafka, RabbitMQ
- **Cloud & Deployment:** AWS (S3, EC2, Lambda, Amplify and more), CI/CD pipelines
- **Testing:** Jest, Mocha, Playwright, Angular Testing, TDD methodologies

ADDITIONAL QUALIFICATIONS

- **Leadership & Team Management:** Extensive experience managing engineering teams and mentoring junior developers across cross-functional environments
- **Agile & Project Management:** Extensive experience with Scrum methodology, sprint planning, stakeholder management, and complete product lifecycle oversight from conception to delivery
- **Technical Documentation:** Strong technical writing skills for API documentation, system architecture, and establishing coding standards and best practices
- **Problem Solving & Optimisation:** Proven track record in complex system debugging, performance optimisation, and architectural planning for scalable solutions
- **Development Operations:** Proficient in version control (Git/GitHub), project tracking (JIRA/Confluence), code reviews, and quality assurance processes
- **Communication & Strategy:** Client communication, requirements gathering, implementation strategising, project estimation, and resource allocation

EDUCATION

M.Tech. Information Technology
2013 Karunya University

AWARDS

Star of the Quarter 2020
Iron Pillar 2019