

Farah Warnakulasuriya | Full Stack Software Engineer

Perth, WA | +61431283515 | warnakulasuriyafarah@gmail.com | [LinkedIn](#) | [GitHub](#)

Profile

Full Stack Software Engineer with international experience in designing, building, and optimizing scalable, high-performance web applications. Adept at backend development, API architecture, database optimization and frontend performance tuning. Strong experience in EdTech, AI and blockchain with a focus on delivering efficient, secure and maintainable software solutions.

Key Skills

- **Frontend:** JavaScript, TypeScript, React.js, Next.js, Redux, Material-UI
- **Backend:** Node.js, Nest.js, Express.js, Scalable API design (RESTful, GraphQL), Python, Flask
- **Databases:** MySQL, MongoDB, SQLite, Prisma ORM
- **Security & Authentication:** JWT, OAuth, role-based access control (RBAC), OWASP best practices
- **DevOps & Cloud:** AWS (EC2, S3, RDS), Firebase, CI/CD Pipelines
- **Software Development Practices:** Agile (Scrum, Kanban), Git/GitHub, Unit Testing, Automated Testing
- **Performance Optimization:** Database query tuning, caching, lazy loading, API rate limiting

Professional Experience

Associate Software Engineer - [Third Space Learning, UK](#)

July 2023 - January 2024

Third Space Learning is a UK based EdTech company providing online tutoring to over 1,000 schools, impacting 700,000+ students.

- Translated Figma designs into scalable, reusable React components, improving frontend development speed and maintaining UI consistency across projects.
- Developed and optimized a high-performance CSV export feature, reducing data processing time by 70% and improving LMS reporting efficiency.
- Architected and refactored backend services using Prisma ORM and MySQL, leading to a 50% improvement in query performance under heavy load.
- Refactored React.js components and implemented lazy loading, cutting frontend load times, improving user experience.
- Designed and deployed a secure authentication system using JWT & RBAC, ensuring scalable access control for 10,000+ users.
- Enhanced Next.js-based Session Issues Management System (SIMS), improving SEO rankings by 30% and optimizing system performance.
- Led peer code reviews and mentored junior developers, improving overall team productivity and adherence to coding standards.

Intern Software Engineer - [Third Space Learning, UK](#)

July 2022 - July 2023

- Designed and developed 30+ RESTful APIs in Node.js/Nest.js, reducing data processing latency by 45% and improving system efficiency.
- Implemented JWT authentication and input validation, reducing unauthorized access attempts by 80%.
- Developed automation scripts in TypeScript, reducing manual data processing workload by 60%.
- Optimized API architecture, reducing redundant function calls and improving server response times by 35%.
- Refactored database queries in MySQL, improving query performance for high-concurrency workloads.

Quality Assurance Executive - [Third Space Global, Sri Lanka](#)

June 2021 – July 2022

Third Space Global is the Sri Lankan operations hub for Third Space Learning, employing over 250 team members to deliver high-quality tutoring and support services.

- Conducted over 500 quality assessments on web-based tutoring platforms to ensure seamless user experience.
- Implemented automated testing scripts, reducing manual QA workload by 30% and improving software reliability.
- Redesigned reporting structures, reducing assessment time and improving clarity in evaluation metrics.
- Trained and managed 250+ educators, ensuring proper use of digital learning tools and platforms.
- Played a pivotal role in the recruitment process, conducting over 50 interviews and screenings to build a team capable of supporting the organization's growth and high educational standards, contributing to a 40% increase in team size.

Community Contributions

Research Intern - VR Goggle Use in Therapy, [Patches Australia](#)

March 2025 – Present

- Conducting research on the effectiveness of Virtual Reality (VR) goggles in therapy and education.
- Developing deployment strategies for VR therapy devices (Meta Quest 2 & 3), ensuring proper system integration.
- Conducting research on user engagement in VR-based education and therapy, exploring how immersive technology can improve learning outcomes.
- Collaborating with developers to evaluate VR applications and API integrations for potential use in education platforms.
- Analyzing user experience (UX) patterns in VR therapy and exploring software solutions for adaptive learning.

Volunteer Software Engineer - [Coders for Causes, Australia](#)

July 2024 – Present

- Developing full-stack web applications for non-profits, integrating React, Node.js, and Firebase.
- Optimizing cloud-based deployments on AWS and Firebase, improving scalability.
- Mentoring junior developers, providing guidance on React.js, Node.js, and best practices.

Projects

-
- **Codex - AI chatbot** - [Github Repository](#) | *Technologies: JavaScript, Vite, Node.js, OpenAI Davinci-003*
AI-powered Chatbot integrating OpenAI's Davinci-003 to assist developers with coding challenges.
 - **Neural Networks for Autism Support** - [Github Repository](#) | *Technologies: TensorFlow, ReCharts*
Gaming platform leveraging AI and deep learning modules to support children with autism in learning.
 - **RDXnodeGuard** - [Github Repository](#) | *Technologies: JavaScript, React.js, Node.js, Firebase*
Engineered a web platform functioning as a node validator for Radix cryptocurrency.
 - **Live Weather Forecaster App** - [Github Repository](#) | *Technologies: JavaScript, React.js, TailwindCSS*
Real-time weather application with OpenWeatherAPI, delivering precise, location-based updates.

Education

Master of Computer Science (IT) specializing in Software Systems

July 2024 - Present

The University of Western Australia, Perth, WA

Bachelor of Science - Software Engineering (First Class Honors)

February 2023 - February 2024

University of Wolverhampton, UK