

ISANJALEE SILVA

Panadura 12500, Sri Lanka | (+94) 71 923 5115 | ihnjmsilva152@gmail.com | linkedin.com/in/isanjalee-silva | github.com/Isanjalee | isanjalee.com

PROFILE

First Class Honours graduate in Information Technology and Management from the University of Moratuwa, with nearly two years of experience in enterprise software engineering, full-stack development, backend systems, data migration, and automated testing. Experienced in Java, PL/SQL, React, Next.js, Node.js, PostgreSQL, AWS, and AI-assisted development workflows. Strong background in building scalable business applications, improving system performance, writing maintainable code, and collaborating with cross-functional engineering teams.

TECHNICAL SKILLS

AI / ML	:Time-Series Forecasting, Machine Learning, Explainable AI (SHAP, LIME), Predictive Modelling, Model Evaluation (MAE, RMSE, R ²), Data Analytics
ML Frameworks	:Scikit-learn, XGBoost, TensorFlow, Keras, Pandas, NumPy, Matplotlib, Seaborn
AI Tooling	:Prompt Engineering, GitHub Copilot, Cursor AI, ChatGPT (AI-assisted development workflows)
Programming	:Java, Python, TypeScript, JavaScript, C#, PL/SQL
Web & Mobile	:React, Next.js, Node.js, NestJS, Fastify, .NET, Flutter, HTML/CSS, Bootstrap
Databases	:PostgreSQL, MySQL, MSSQL, MongoDB, Drizzle ORM, Redis, OpenSearch Enterprise
& DevOps	:IFS Cloud, IFS Developer Studio, JUnit, GitHub, Bitbucket, Jira, Confluence, Grafana
Methodologies	:Agile / Scrum, Sprint Planning, Backlog Refinement, Code Review, Technical Documentation

PROFESSIONAL EXPERIENCE

Software Engineer (Java) | IFS R&D International (Pvt) Ltd, Colombo, Sri Lanka

Oct 2024 – Dec 2025

- Developed and customised enterprise IFS Cloud modules (backend business logic and UI) for international aviation clients, including contributions to Qantas demonstrations.
- Designed and implemented large-scale data-migration pipelines from Maintenix to IFS Cloud using SQL views, PL/SQL scripts, and upgrade-job sequences.
- Built automated unit tests across Maintenix and IFS Cloud, increasing test coverage and defect detection; produced technical documentation and led knowledge-transfer sessions.
- Pioneered AI-assisted development workflows using GitHub Copilot and Cursor AI, improving PL/SQL and testing productivity by ~30–50% and UI development speed by ~60%.
- Mentored junior developers through code reviews; collaborated closely with Canada-based engineering teams.

Stack: Java (J2EE), PL/SQL, IFS Cloud, JUnit, Bitbucket, Jira, Grafana.

Software Engineer | Inivos Technology (Pvt) Ltd, Colombo, Sri Lanka

Feb 2024 – Aug 2024

- Developed a B2B transport-automation platform covering ride requests, approvals, vehicle allocation, cost optimisation, and HR/Finance reporting.
- Integrated Google Maps APIs (Places, Geocoding, Auto Pin Placement); reduced location-selection time by ~45%.
- Applied lazy loading and code splitting to improve initial load performance by ~30%.

Stack: React, Next.js, NestJS, MSSQL.

Software Engineer Intern | Inivos Technology (Pvt) Ltd, Colombo, Sri Lanka

Jan 2023 – Jul 2023

- Built reusable React UI components (hooks, forms, routing) and developed small applications using C# and .NET to deepen understanding of OOP and asynchronous concepts.
- Prepared comprehensive project documentation including setup guides, API notes, and workflow references; produced UML diagrams and system flowcharts for internal use.
- Supported debugging and frontend issue resolution across multiple client projects, working closely with senior engineers in an agile delivery environment.

SELECTED PROJECTS

Full-Stack Developer | Med Link, ALDTAN (Pvt) Ltd

Jan 2026 – Present

- Developing a multi-tenant healthcare management platform for clinic owners, doctors, and assistants, covering patient records, appointments, prescriptions, inventory, reporting, and audit logging.
- Built responsive Next.js/React frontend workflows with role-based dashboards, API integrations, and secure session handling using HTTP-only cookies.
- Implemented RESTful backend APIs using Node.js, Fastify, TypeScript, Zod, JWT, RBAC, rate limiting, and PostgreSQL-backed workflows.
- Deployed and maintained the production system on AWS using Amplify, EC2, RDS PostgreSQL, Nginx, HTTPS/SSL, PM2, and a Turborepo monorepo structure.

Stack: TypeScript, Next.js, React, Node.js, Fastify, Zod, PostgreSQL, Drizzle ORM, AWS Amplify, AWS EC2, AWS RDS, Nginx, PM2.

Team Lead | Dev Labs Website, University of Moratuwa*Jan – Feb 2024*

- Led design and delivery of the Dev Labs student information platform under Scrum; coordinated development, documentation, and stakeholder communication.

Backend Developer | Restaurant Management System (Academic)*Sep – Oct 2022*

- Implemented Spring Boot REST APIs and an admin dashboard covering menu, order, and customer modules; integrated MySQL persistence layer.

Mobile Developer | Home Services Platform*Jul 2021 – Jul 2022*

- Developed a service-matching system connecting clients with local service providers; designed mobile UI in Flutter, built scheduling and notification features, and supported the admin panel and database layer.

Freelance Frontend Developer*2024 – Present*

- Delivered responsive, user-friendly interfaces across multiple freelance web projects using TypeScript, React, and Next.js; built reusable component libraries and integrated frontend workflows with REST APIs.

EDUCATION**B.Sc. (Hons) in Information Technology and Management | First Class***Jan 2020 – Jul 2024**University of Moratuwa, Sri Lanka | GPA: 3.72 / 4.20 | Medium: English*

- Honours Thesis: AI-Based Customer Assistance and Recommendation System for Transportation Service Providers.
- Relevant coursework: Programming Fundamentals, Object Oriented Programming, Software Engineering Methods, Database Management Systems, Data Structures and Algorithms, Management Information Systems, IT Project Management, Principles of Management, Principles of Economics, Financial Accounting, Management Accounting, and Principles of Marketing.

RESEARCH EXPERIENCE**Lead Developer | Ride Demand Prediction Module (Final Year Research)***2023 – 2024**AI-Based Customer Assistance and Recommendation System for Transportation Service Providers*

- Designed and implemented ride-demand prediction models integrating historical ride datasets with weather data; achieved up to 90% accuracy in weather-enhanced forecasting and 87% performance across time series approaches.
- Built and compared ML models including Decision Tree Regressor, Gradient Boosting, ARIMA, SARIMA, LSTM, and Prophet; evaluated using MAE, MSE, RMSE, and R².
- Applied Explainable AI techniques (SHAP, LIME) to improve model transparency, interpretability, and trust in operational decision-making.
- Produced geospatial demand visualisations (heatmaps) and integrated prediction outputs with NLP-based customer assistance and profiling modules developed by team members.

Tools & Methods: Python, Scikit-learn, XGBoost, TensorFlow, Pandas, NumPy, Time-Series Analysis, Explainable AI (SHAP, LIME).

KEY ACHIEVEMENTS

- Graduated with First Class Honours and ranked 2nd in batch in B.Sc. (Hons) Information Technology and Management at the University of Moratuwa, with a GPA of 3.72/4.20.
- Achieved up to 90% prediction accuracy in weather-enhanced ride-demand forecasting and approximately 87% overall performance across time-series models in final-year research.
- Introduced AI-assisted engineering workflows at IFS R&D, improving PL/SQL development and testing productivity by approximately 30–50%, and UI delivery speed by approximately 60%.
- Contributed to international client demonstrations, including Qantas, and collaborated with Canada-based engineering teams on enterprise migration projects.

Languages

English (Fluent) | Sinhala (Native)

REFERENCES**Dr.(Ms.) Upeksha Ganegoda**

Senior Lecturer Grade II

Department of Interdisciplinary Studies

Faculty of Information Technology

University of Moratuwa

Mobile : (+94) 71 996 8294 | Email : upekshag@uom.lk

Dr. A.K.C. P. Premarathna

Managing Director, ALDTAN (Pvt) Ltd

Former Senior Researcher, University of Greenwich, London

Mobile : (+44) 7832 420690 | Email : chanaka@aldtan.com