THIVVIKAN PREMASRI

Jaffna, Sri Lanka

thivvikanpremasri@gmail.com| **+94 76 589 3654 |**[GitHub](#) **|** [Portfolio](#) **|**[LinkedIn](#)

SUMMARY

Software Engineer with strong experience in Java backend development, REST APIs, and database-driven applications. Skilled in React, modern frontend practices, and building scalable full-stack systems. Strong foundation in OOP, clean code, design patterns, and testing. Passionate about high-quality engineering and solving real-world problems.

TECHNICAL SKILLS

- **Languages:** Java, Python, C#, PHP, JavaScript
- **Frameworks:** Spring Boot, ASP.NET MVC, react
- **Databases:** MySQL, SQL Server
- **Web:** HTML, CSS, JavaScript, react, vite, spring boot
- **Developer Tools:** Git, GitHub, IntelliJ IDEA, Visual Studio, PyCharm, Postman
- **CS Foundations:** Data Structures & Algorithms, OOP, Clean Code, Design Patterns, SOLID principles, MVC
- **Systems & Infrastructure:** REST APIs, basic CI/CD, version control, Linux basics
- **Testing:** JUnit, manual testing, debugging, code reviews

---

INTERNSHIP EXPERIENCE

Java Developer Intern – Lanka Designs

Nov 2024 – May 2025 | Jaffna, Sri Lanka

- Developed backend modules in **Java** following **OOP and layered architecture**, improving code reusability by **~30%**
- Implemented **CRUD operations** with MySQL, reducing data entry errors by **20%**
- Debugged and resolved **15+ reported defects**, improving stability and user experience
- Wrote and reviewed **pull requests** using GitHub, collaborating in a team of **4 developers**

PROJECTS

StarEvents – Online Event Ticketing System

ASP.NET MVC | C# | MySQL

- Built ticketing platform supporting **multiple user roles (admin, organizer, customer, receptionist)**
- Implemented **secure authentication** and **ticket purchase workflow** for **users.**
- Designed normalized **SQL schema** improving query performance.
- Added ticket validation module reducing duplicate entries to **0.**

Zyroute – Advanced Bus Reservation System

Java | PHP | PostgreSQL | react + vite

- Implemented **real-time seat reservation** and schedule management
- Designed **role-based access control** for admins, bus owners, drivers, conductors, customers and guardians.
- Built backend database of **500+ sample bookings** to test reliability
- Reduced booking conflicts using transaction-safe SQL operations

---

RocketToMarsGame – AI-Powered Multi-Level Unity Game

Unity | C# | NavMesh | FSM | JSON | Game AI

- Developed a 3-level Unity game featuring **AI-driven navigation, combat, and puzzle solving**
- Implemented **NavMesh pathfinding** with autonomous obstacle avoidance and dynamic route planning
- Built **enemy perception and decision system** to detect closest target, rotate, and fire based on range and cooldown
- Designed **FSM-based agent control** (Idle, MovingToOrb, MovingToReceiver, MovingToWall)
- Implemented **learning chatbot** with a minor level NLP
- Built **color-matching puzzle system** with environment perception and validation logic

---

Sales Data Analysis CLI System

Python | Pandas | NumPy | Matplotlib

- Automated Excel sales analysis reducing manual effort by **2–3 hours per report.**
- Generated CLI-based dashboards and visualizations for decision-making.
- Added data-cleaning steps reducing invalid records.

Bus Reservation System – CLI (Java)

Java | File Handling | Custom Data Structures

- Built CLI reservation system using **queues, lists, and arrays.**

- Implemented **waiting list + seat allocation algorithm**, increasing seat usage efficiency.

- Added admin features for route and passenger management.

- Practiced file-based persistence handling **hundreds of records.**

TEACHING EXPERIENCE

IT Instructor (Part-Time) – ESOFT Metro Campus

Feb 2025 – Dec 2025 | Jaffna, Sri Lanka

- Taught **DSA, OOP, Java, Python, and C#** to **100+ students** across multiple batches.

- Conducted **hands-on coding labs**, improving average lab assessment scores.

- Guided students through debugging projects and **Big-O complexity analysis.**

- Mentored **mini-projects** and evaluated assignments for **code quality and design principles.**

EDUCATION

BEng (Hons) Software Engineering

London Metropolitan University

Feb 2025 – Mar 2026(Expected)

Higher National Diploma in Software Engineering

ESOFT Metro Campus

July 2023 – Feb 2025

CERTIFICATIONS

Meta – Introduction to Back-End Development

IBM – Python 101 for Data Science

IBM – Data Analysis with Python

Sololearn – Introduction to Java

HackerRank – Java (Basic)