

CHANINDHU BANDARA

AI Engineer | Software Engineering Graduate | Full-Stack, Cloud & Distributed Systems

- **Location** - Colombo, Sri Lanka
- **Number** - +94 71 885 5482
- **Email** - chanindhubndr@outlook.com
- **LinkedIn** - [linkedin.com/in/chanindhu-bandara-8a2a40283](https://www.linkedin.com/in/chanindhu-bandara-8a2a40283)
- **GitHub** - github.com/Chanindhu

SUMMARY

Software Engineering graduate focused on AI engineering, full-stack development and cloud-based systems. Built a portfolio of applied projects covering AI-powered academic integrity workflows, machine learning prediction, AWS deployment, distributed .NET systems, Android applications, Java architecture projects and C-based operating systems work. Skilled in Python, Java, C#, C, TypeScript, JavaScript, SQL, FastAPI, React, PostgreSQL, AWS, Docker and GitHub, with a 78.71 CWA and Dean's List recognition.

TECHNICAL SKILLS

Programming Languages: Python, Java, C#, C, TypeScript, JavaScript, SQL

AI / Machine Learning: Machine learning workflows, NLP concepts, feature engineering, model comparison, plagiarism evidence and AI-risk analysis

Frontend Development: React, TypeScript, Vite, Tailwind CSS, HTML, CSS, Android Studio

Backend & APIs: FastAPI, ASP.NET Core, WCF, WPF, REST APIs, authentication and role-based workflows

Databases: PostgreSQL, MySQL, SQLite, Room Database

Cloud & DevOps: AWS EC2, RDS, VPC, CloudWatch, EBS, ALB, Auto Scaling, Docker, Git, GitHub

Testing & Tools: Postman, pytest, Playwright, k6, Jupyter Notebook, VS Code, Visual Studio

Computer Science: Data structures, algorithms, operating systems, multithreading, distributed computing, object-oriented design

SELECTED AI & SOFTWARE PROJECTS

EduGuard - AI-Powered Academic Integrity Platform | *Final Year Capstone Project*

Technologies: FastAPI, React, TypeScript, PostgreSQL, Celery, Docker, AI/NLP workflows

- Developed with a team to support document submission, plagiarism evidence review, AI-generated text risk analysis, role-based dashboards, reports, feedback and analytics.
- Contributed to academic workflows covering authentication, student assignment submission, lecturer review flows, controlled report access and validation assets.

BLEVE Pressure Prediction - Machine Learning Project | *Predictive ML / Kaggle-style workflow*

Technologies: Python, Jupyter, scikit-learn, XGBoost, CatBoost, SVR, neural networks

- Built a machine learning workflow for predicting BLEVE blast-wave peak pressure using preprocessing, feature engineering, model comparison and evaluation metrics.
- Structured the project with a reproducible notebook workflow, requirements, prediction output and methodology documentation.

PitCrew Connect - AWS Cloud Deployment Case Study | *Cloud Computing project*

Technologies: PHP, Apache, MySQL, AWS EC2, RDS, VPC, CloudWatch, EBS, ALB, Auto Scaling

- Deployed a vehicle service booking platform with customer booking, tracking and staff management features backed by Amazon RDS MySQL.
- Documented a complete AWS deployment including VPC networking, monitoring, storage backup, load balancing, launch templates and Auto Scaling.

ASP.NET Core Banking Platform | *Full-stack .NET application*

Technologies: C#, ASP.NET Core MVC/API, SQLite, REST APIs

- Created a banking platform combining a RESTful API layer with MVC web dashboards for accounts, users, transactions, admin management and transfers.
- Separated backend service logic and presentation layer to demonstrate API-driven application design.

PROJECTS CONTINUED

- **P2P Job Swarm - Distributed .NET System** - ASP.NET Core, WPF, .NET Remoting, SQLite and IronPython project for peer discovery, job exchange, SHA-256 validation and distributed execution.
- **MKX Gaming Lobby WCF** - C# WPF/WCF distributed lobby with unique login, rooms, public/private messaging, file sharing, polling and duplex client callbacks.
- **C pthread Sorting Simulator** - Operating Systems project using C, POSIX threads, mutexes, condition variables and shared swap tracking.
- **Calorie Tracker Android App** - Native Android Java app with meal logging, Room Database, nutrition API integration, camera capture and daily goal tracking.
- **Java OOP / Architecture Projects** - City grid planner, railway simulator, air traffic simulator and JavaFX maze engine demonstrating OOP, design patterns, Gradle and architecture concepts.
- **Data Structures & Algorithms Projects** - Airline route planner using BFS, custom hash table, linear probing and heap sort.

EDUCATION

Bachelor of Computing - Software Engineering Major | Curtin University, Colombo, Sri Lanka | Completed 2026

- Completed degree requirements; graduation ceremony pending campus schedule.
- Academic Result: CWA 78.71 | Dean's List: Year 2 Semester 2 and Year 3 Semester 2.
- Relevant areas: Machine Learning, Cloud Computing, Distributed Computing, Operating Systems, Unix and C Programming, Data Structures and Algorithms, Software Architecture and Mobile Application Development.

Chartered Institute of Management Accountants (CIMA) | 2023 - Present

- Reading for Certificate Level and Operational Level (Stage 1).

St. Peter's College, Colombo 04 | Primary and Secondary Education

- G.C.E. Advanced Level Examination: ICT - B, Physics - C, Combined Mathematics - C, English - B.
- G.C.E. Ordinary Level Examination: 7A passes and 2B passes.

CERTIFICATION

Google AI Essentials Specialization | Coursera / Google | 2025

- Completed five-course specialization covering AI fundamentals, productivity with AI tools, prompting, responsible AI use and AI workflow skills.

ACHIEVEMENTS & ACTIVITIES

- Language Day - Best Speaker (English), 2013.
- Appointed as Steward, Junior Prefect and Senior Prefect at St. Peter's College; served as Finance in Charge of the Prefect Body.
- Supported the Road to Rights Project (R2R), Stewards in Charge (SIC), Interact Club, English Literary & Drama Society and Peterite Media.
- Represented the College Taekwondo Team and received Peterite Colours in 2018.
- Represented the school swimming squad, college chess team and NCC Cricket Club.
- Played rugby for Curtin Colombo.
- Completed Year 1 of Aviation at Sri Lanka Air Force, Rathmalana.

LANGUAGES

English, Sinhala

REFERENCES

Dr. Umanga Pilapitiya, Acting Head - Computing, Coordinator - HDR Unit, Discipline Lead - SE, Senior Lecturer (HG), SLIIT. Email: umanga.p@sliit.lk, Phone: +94 77 543 7471

Ruwindhu Peiris, Managing Director, Stax. Email: ruwindhup@stax.com, Phone: +94 77 270 286