

Randil Fernando

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EDUCATION

Informatics Institute of Technology, Colombo, Sri Lanka	09 2024- 09 2028
<i>BSc (Hons) Computer Science, University of Westminster</i>	
Relevant Modules and Marks:	
<ul style="list-style-type: none">○ Software Development Group Project CW1 - 94○ Object Oriented Programming - 84○ Software Development II (Java) - 85○ Mathematics for Computing - 98	
Informatics Institute of Technology, Colombo, Sri Lanka	09 2025- 11 2025
<i>Higher Certificate in Machine Learning</i>	
Relevant course work: Advanced Python OOP, Data training and Learning Algorithms, Data cleaning for Corporations, Advanced Mathematics, Computer Vision	
ESOFT Metro Campus, Wennappuwa, Sri Lanka	05 2025-11 2025
<i>Dual Diploma in English and IT</i>	
Relevant course work: C#.net Windows Application Development, Python OOP, Python Programing, Databases with SQL, Introduction to Software Engineering	
St. John Paul II Cambridge College, Wennappuwa, Sri Lanka	05 2023-07 2023
<i>IGCSE, Cambridge Ordinary Level Examination : 7 A*s</i>	
Relevant Subjects: Mathematics, Biology, Chemistry, Physics, Computer Science, Sinhala, English	

PROFESSIONAL EXPERIENCE

Co-Founder & Robotics Technical Lead – Neurobloom	06 2025 - Present
<ul style="list-style-type: none">• Embedded Firmware Architecture: Architecting optimized C++ firmware for ESP32, orchestrating high-speed displays, GPS modules, and touch sensors for real-time responsiveness.• Emotion Engine Development: Developing a physics-based state machine to drive organic animations and dynamic behavioral transitions based on user interaction.• Hardware Prototyping: Leading the iterative design of power distribution and PCB layouts to ensure signal integrity across multiple peripheral devices.• System Optimization: Continuously refining graphical rendering and memory management to maximize performance on constrained microcontrollers.	
Founder & Lead Developer – 4Rent.lk (WIP)	04 2025 - Present
<ul style="list-style-type: none">• System Architecture: Building a Go (Golang) microservice gateway and integrating WSQ2 Asgardeo (CIAM) to handle secure, enterprise-grade vendor authentication via OIDC/OAuth 2.0.• Engineered a full-stack platform using TypeScript, React, Node.js, MongoDB, and Vercel, ensuring scalability and performance• Designed intuitive user interfaces and implemented secure authentication and data management systems• Conceptualized, developed, and deployed Sri Lanka's first all-in-one rental marketplace for vehicles, properties, and experiences	
Sasnaka Sansada STEM, English, Computer Science, Mathematics & Leadership Mentor	10 2025 - Present
<ul style="list-style-type: none">• Developed lesson plans for students with different levels of understanding• Conducted live seminars for underprivileged students across the island	
Cambridge English Tutor	07 2023 – 10 2025
<ul style="list-style-type: none">• Developed lesson plans for students with different levels of understanding• Qualifications include completion of the Cambridge English Examinations (STARTERS, MOVERS, FLYERS, KET, PET, FCE, CAE, CPE) with distinction• Conducted live class as well as online classes for students that are facing for the Cambridge English Examinations	
Freelance Full-Stack Developer, Remote – DevNeko	03 2024 - Present
<ul style="list-style-type: none">• Developed full-stack applications using Python with FastAPI backend and React frontend• Implemented containerized deployments using Docker for scalable web applications• Built responsive UIs with modern frameworks (React, TypeScript, Tailwind CSS)	

PROJECTS

- BEAN – AI Keychain Therapeutic Assistant Robot** **06 2025 - Present**
- R&D of a companion robot with a physics-based "Emotion Engine" for organic human-robot interaction
 - Built with C++, ESP32 S3 NANO, Optimized Graphics Rendering, and Real-time Signal Processing
 - Built a RAG-driven cloud backend to ground LLMs in therapeutic context.
- Cloud-Native CI/CD & Observability Pipeline** **11 2025 - Present**
- Automated application testing and Docker container deployments using Jenkins and GitHub.
 - Implemented real-time system monitoring and observability dashboards with Prometheus and Grafana.
- Motion Relief App** **03 2025 - Present**
- Android app to reduce motion sickness via dynamic visual overlay
 - Built with Kotlin, optimized for real-time performance
- SQRL – Budget Tracker (Open source)** **02 2025 – 07 2025**
- Kotlin app for expense tracking and spending analytics
 - Designed clean UI with local data storage and charts

SKILLS

Programming languages: Python, Java, C#, C++, Kotlin

Frameworks/Tools: Ubuntu, ROS, Git, FastAPI, React, Docker, GCP, Prometheus, Notion, Click Up, Slack

Hackathons & Competitions: 1st runners up in AdaptIQ (IIT), 2nd runners up in Vertex (IIT), Startup today (KDU) Finalists

Languages: English (Advanced), Sinhala (Advanced), Italian (Beginner)

Honors: Founder of DevNeko (Mobile/ Web App Development Startup), Batch Representative L4 CS, Student's Association President at ESOF Metro Campus , Batch Representative L5 CS, Island 1st in Swimming 100m Butterfly 2024

Interests: Robotics, Web Development, Game Development, Video Games, Anime, Swimming, Compering, Public Speaking, Guitar, Ukelele, Piano

VOLUNTEERING & EXTRACURRICULARS

- Batch Representative L4 G14 & L5 G4, Informatics Institute of Technology** **09 2024 - Present**
- Serve as liaison between my batch and faculty, addressing academic and student concerns
- Mentor, Sasnaka Sanasada Foundation** **10 2025 - Present**
- Volunteered as a Mentor at Sasnaka Sansada Foundation, supporting underprivileged students teaching Computer Science and English
- Committee Member, IEEE RAS, CIS** **06 2025 - Present**
- Volunteered and coordinated several events organized by the IEEE Student Branch of IIT and served as the Program & Logistics Coordinator for several trademark events
- Announcer / Photographer, Media Society of Informatics Institute of Technology** **09 2025 - Present**
- Volunteered to Announce, Photograph, Video graph, Graphic Design in all the major events orchestrated by Informatics Institute of Technology
- Committee Member, Sports Council (IIT)** **02 2026 - Present**
- Facilitating university-wide sports events and managing cross-functional student teams, demonstrating strong organizational, leadership, and time-management skills.

REFEREES

Banuka Athuraliya

Managing Director - Andro Dollar Network (PVT) LTD and SkillVerse (PVT) LTD
SDGP.Ik Module Leader/Visiting Lecturer - Informatics Institute of Technology (IIT)
0777781061
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Ms. S. Baladharshana Sathianathan

Former Course Director-Aquinas College of Higher Studies
Senior Lecturer-London Graduate School (Britannia Education Services and Tuition)
Asst Lecturer/Lecturer -University of Bolton and Weigan and Leigh Campus
Contact Number - 0770-137368