

# Vichaksha Viduranga Geekiyanage

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## SUMMARY

Final year Electronic & Computer Science undergraduate focused on Java, ML, IoT, and software engineering. Experienced in fullstack development, NLP research, and technical leadership (IEEE). Looking to contribute technical expertise and research experience to innovative projects in industry.

## WORKING EXPERIENCE

**Teller & Administrative Co-helper, People's Bank – Nugegoda City & RHO** 2021-2022  
– Assisted branch operations and transactions; supported compliance and documentation.  
– Improved loan processing by maintaining accurate records.

## EDUCATION

**BSc (Hons) in Electronic & Computer Science** *Expected Graduation:- Jan 2026*  
**University of Kelaniya**  
CGPA : 2.79

Relevant coursework: Machine Learning, Java, Data Structures, Embedded Systems

**G.C.E. Advanced Level – Physical Science Stream** 2020  
**Nalanda College, Colombo 10**  
Results: Combined Mathematics (B), Chemistry (B), Physics (C)

**G.C.E. Ordinary Level: 8A's, 1B** 2015

## SELECTED PROJECTS

**Sinhala Lyrical ASR (NLP)** | *Whisper, LoRA, Elasticsearch, 🐙 GitHub* Aug 2024 - Present  
– Fine-tuned Whisper-large-v2 with LoRA for Sinhala lyric transcription; captured harmonies in heavy metal music, especially in Sinhala music.  
– Applied transfer learning, parameter-efficient tuning, token forcing; built 30s chunking + adapter pipeline.  
– Integrated Elasticsearch for lyric search and copyright detection.

**SmartForce HR Management System** | *Spring Boot, React.js, MongoDB, 🐙 GitHub* 2024  
– Full-stack HRMS with microservices, role-based access, payroll/leave/asset management.  
– Deployed with CI/CD; tested via Swagger, Postman, Docker.

**Netflix Clone** | *Java Spring Framework, MySQL, HTML/CSS, 🐙 GitHub* 2024  
– Built a video streaming platform in a monolithic Spring architecture.  
– Implemented user authentication, video catalog, and streaming simulation.

**IoT Parking Space Management** | *ESP8266, Firebase, Google Maps API, 🐙 GitHub* 2023  
– Automated parking solution with sensors, NodeMCU, Firebase real-time DB.  
– Integrated QR code entry/exit and Google Maps navigation.

**Sign Language Detection** | *TensorFlow/Keras, OpenCV, Roboflow, 🐙 GitHub* 2023  
– Developed a Python-based system to detect and classify sign language gestures in real time.  
– Preprocessed dataset with Roboflow and trained a CNN model using TensorFlow/Keras + OpenCV.  
– Achieved accurate recognition through optimized image preprocessing and a fine-tuned deep learning model.  
– Applied computer vision + ML to enhance accessibility and human-computer interaction.

SKILLS

Languages	Java, JavaScript/TypeScript, Python, C, SQL, HTML/CSS
Frameworks & Tools	React, Spring Boot, Node.js, PyTorch, TensorFlow, Hugging Face, LangChain, Git, Jupyter, Linux
Databases & Cloud	MySQL, MongoDB, Firebase, Elasticsearch
Machine Learning & LLMs	Statistics & Linear Algebra, Tokenization, Embeddings, Transfer Learning, PEFT, LoRA, Whisper
Embedded & IoT	ESP32, Arduino, Microcontrollers, RFID, Sensors

LEADERSHIP & VOLUNTEERING

Secretary, IEEE Industrial Electronics Society SB Chapter – University of Kelaniya	2024
– Organized events/workshops for 100+ peers, managed IEEE global communication.	
Coordinator, IEEE Robot Battle UOK	2024
– Managed robotics competition with 200+ participants; secured IEEE sponsorships.	
Webinar Host, IEEE Computer Society SB Chapter – UOK	2023
– Facilitated discussion between speakers and participants, ensuring smooth event flow.	
Team Lead, AIESEC IGV Charity Project	2023
– Led international volunteers for community development.	
Content Writing Lead, ECSC UOK	2023
– Authored and edited technical/engineering articles.	
Webinar Speaker & Organizer, ECSC TechnoSymphony	2022
– Delivered a webinar on Machine Learning and Industrial Automation to 100+ participants.	
– Engaged students in applied ML concepts and career guidance.	

CERTIFICATIONS

- Makerspace Training | American Center Colombo (2025)
- Prompt Engineering | Cognitive AI Class (2024)

LANGUAGES

English (Fluent), Sinhala (Native)

REFERENCES

<b>Prof. A.L.A.K. Ranaweera</b> Professor, Department of Physics & Electronics University of Kelaniya, Sri Lanka Coordinator – BECS Degree Program Ph.D. (Kyung Hee Univ., South Korea); B.Sc. (Univ. of Kelaniya, Sri Lanka); MIEEE, MURSI Email: arunaran@kln.ac.lk Mobile: +94 77 717 9201	<b>Dr. (Mrs.) W. A. C. Weerakoon</b> Senior Lecturer Department of Statistics & Computer Science University of Kelaniya, Sri Lanka Ph.D. (Univ. of Moratuwa); M.Sc. (Univ. of Colombo); B.Sc. (Hons) Computer Science (Univ. of Kelaniya) Email: chinthanie@kln.ac.lk Mobile: +94 77 719 4802
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