ISURI DEVINDI

Department of Computer Engineering,
University of Peradeniya, Sri Lanka

🌐 isuridevindi.github.io ✉ gaisuridevindi@gmail.com
📞 +94 71 371 3686 github.com/isuridevindi
✏ Technical blog in /in/isuri-devindi

EDUCATION

BSc.Eng (Hons.) in Computer Engineering GPA: **4.00/4.00**
University of Peradeniya Class rank: **1/415**
2018 Nov - 2023 Dec

G.C.E. Advanced Level Examination Z-Score: **2.2768**
Hillwood College, Kandy District rank: **6/2784**
2004 - 2017 National Rank: **113 / 32075**

EXPERIENCE

2024 Jan - Present

Instructor
Department of Computer Engineering, University of Peradeniya, Sri Lanka
Computer Architecture (CO224), Image Processing (CO543), Operating Systems (CO327)

2023 Jan - 2023 May

Visiting Research Assistant Supervised by Prof. Archan Misra
Pervasive Sensing & Systems Lab, Singapore Management University
Exploring spatiotemporal compressive sensing techniques for event-based data fed into and processed by Spiking Neural Networks.

2021 - 2022

Teaching Assistant
Department of Computer Engineering, University of Peradeniya, Sri Lanka
Embedded Systems (CO321), Data Structures and Algorithms (CO322), Programming and Networking (CO253), Programming Methodology (CO222)

2021 - Present

Technical Article Writer (Part-time)
Enlear Pvt. Ltd
Writing technical content on computer vision, machine learning, and web development.

PUBLICATIONS

IEEE Access
Under Review

Multimodal Deep Convolutional Neural Network Pipeline for AI-Assisted Early Detection of Oral Cancer
Isuri Devindi, Dinura Dissanayake, Sashini Liyanage, Achintha Harshamal, Dhanushki Mapitigama, Nadisha Piyarathne, Kalani Hettiarachchi, Sumudu Rasnayaka, Ruwan Jayasinghe, Roshan Ragel, Isuru Nawinne

Scientific Reports
Under Review

Hybrid PWM-Quantization ECG Compression: Balancing Simplicity, Compression Ratios, and Signal Fidelity
Isuri Devindi, Sashini Liyanage, Titus Jayarathna, Janaka Alawatugoda, Roshan Ragel

Oral Oncology Reports
Under Review

Comprehensive Dataset of Annotated White Light Images of Oral Cavity and Novel Web Tool for Image Annotation
N. S. Piyarathne, S.N. Liyanage, R.M.S.G.K. Rasnayaka, P.V.K.S. Hettiarachchi, **G.A.I. Devindi**, F.B.A.H. Francis, D.M.D.R. Dissanayake, R.A.N.S. Ranasinghe, M.B.D. Pavithya, I. Nawinne, R.G. Ragel, R.D. Jayasinghe

MERCon 2024 *Under Review* 🌐	**Decoding Non-Motor Imagery Tasks with Non-Invasive EEG Based Brain Computer Interface: A Review** Sumudu Lakmali, Praveen Dhananjaya, Isurika Adikari, **Isuri Devindi**, Sashini Liyanage, Mahanama Wickramasingha, Theekshana Dissanayake, Roshan G. Ragel, Isuru Nawinne
MERCon 2024 *Under Review* 🌐	**EEG Based Brain-Computer Interface for Inner Speech Classification** Praveen Dhananjaya, Isurika Adikari, Sumudu Lakmali , **Isuri Devindi**, Sashini Liyanage, Mahanama Wickramasingha, Theekshana Dissanayake, Roshan G. Ragel, Isuru Nawinne
MERCon 2024 *Under Review* 🌐	**Self-Paced Brain-Computer Interface on Sensorimotor Rhythms for Controlling Virtual Objects** Avishka D Athapattu, Prageeth Savinda Bandara Dassanayake, Sewwandie C Nanayakkara, Sashini Liyanage, **Isuri Devindi**, Roshan G. Ragel, Theekshana Dissanayake, Isuru Nawinne

ACHIEVEMENTS

2024	**Gold medal for excellence in Computer Engineering** Awarded for the best performance at the Department of Computer Engineering, University of Peradeniya (Out of 60)
2024	**Prize for Engineering Mathematics** Prof. T.D.M.A. Samuel prize awarded for the enthusiasm and excellence in Engineering Mathematics at the Faculty of Engineering, University of Peradeniya (Out of 415)
2023	**Bronze Award in NBQSA 2023** | **National ICT Awards** **Bronze** award in Tertiary Student Projects (Technology) (Out of 46 teams) for the project "Oral Cavity Image Annotation and Cancer Prediction from White Light Images"
2022	**IEEEXtreme 16.0** | **24 hour global algorithmic programming competition** Team Name – bitLasagna, Country Rank – 27, Global Rank – 427 (Out of 14600+ participants)

OTHER PROJECTS

2022 Jan - 2022 March ▶️🔗	**Reconstructing Highly Degraded License Plates** | **Group** **Demonstration of the efficacy of traditional image processing techniques to reconstruct highly degraded images of license plates obtained from CCTV footage, when the source of degradation is unknown.** Technology: Python, OpenCV
2021 🌐▶️	**Remote Proctoring System** | **Group** **A single device with video streaming facility that integrates the hardware and software components needed to conduct virtual proctoring of an examination in a university.** Technology: React.js, Express.js, MongoDB, Node.js
2020 🔗	**8-bit single cycle processor** | **Group** **An 8-bit single cycle CPU with associated memory hierarchy. The processor includes an ALU, register file, control logic, forwarding unit, data memory, data cache, instruction memory and instruction cache.** Technology: Verilog-HDL

EXTRA-CURRICULAR ACTIVITIES & LEADERSHIPS HELD

2020 - 2024 **Member of the Web Consultation team of University of Peradeniya**

2022 - 2023 **Secretary in IET on Campus of the University of Peradeniya**

2021 - 2022 **President of the Music Society of the University of Peradeniya**

REFERENCES

Prof. Roshan G. Ragel | roshanr@eng.pdn.ac.lk
Head of Department, Department of Computer Engineering, Faculty of Engineering, University of Peradeniya, Sri Lanka

Dr. Isuru Nawinne | isurunawinne@eng.pdn.ac.lk
Senior Lecturer, Department of Computer Engineering, Faculty of Engineering, University of Peradeniya, Sri Lanka

Prof. Archan Misra | archanm@smu.edu.sg
Vice Provost (Research), School of Computing & Information Systems, Singapore Management University, Singapore