

Sakuna Jayasundara

Electronic and Telecommunication Graduate

+94 71 384 9731 | sakunaj1996@gmail.com | [linkedin.com/in/sakuna-harinda](https://www.linkedin.com/in/sakuna-harinda) | sakunah.xyz

EDUCATION

University of Moratuwa

Moratuwa, SriLanka

Bsc. Eng. Hons in Electronic and Telecommunication Engineering

Aug. 2017 – Dec. 2021

- CGPA - 3.92 (First Class Honours)
- Dean's List in semester 1, 2, 3, 6, 7, 8

Sivali Central College

Ratnapura, SriLanka

Secondary Education

Aug. 2006 – Aug 2015

- Advanced Level in Physical Stream - 3As - District Rank - 3
- Ordinary Level - 9As

EXPERIENCE

Paraqum Technologies (Pvt) Ltd., SriLanka

June 2019 – December 2019

Trainee Electronic Engineer

- Developed a GTP (GPRS Tunneling Protocol) Packet Analyzing Software with a Testing environment
- Developed a Load Balancing Software to analyze network interfaces and manage data traffic
- Performance and Functionality enhancement for the AD Client software used in the company

Axiata Digital Labs, SriLanka

June 2021 – Present

DevOps Engineer

- Developing applications in the API Gateway in Celcom, Malaysia to provide necessary services for the customers all around the world

PUBLICATIONS

Kalana Abeywardane, Shechem Sumanthiran, **Sakuna Jayasundara**, Sachira Karunasena, Ranga Rodrigo, Peshala jayasekara **KORSAL: Key-point Detection based Online Real-Time Spatio-Temporal Action Localization** (2021 arxiv preprint)

PROJECTS

Maritime Surveillance - Final Year Project | *Python, PyTorch, Keras, Tensorflow, Opencv* Feb 2020 – March 2021

- Developed an algorithm for Object Detection, Tracking and Suspicious Activity Recognition for Maritime Surveillance using Thermal Vision
- Developed a novel, state of the art spatio-temporal activity detection framework utilizing key-point based detection architecture.
- This system has the ability to do surveillance tasks with unmanned vessels and help navy personnel to detect suspicious activities in the sea
- Developed an interface using PyQt5

Plant Monitoring System | *Python, Keras, Opencv, Raspberry Pi*

April 2019 – June 2019

- Developed a Machine Vision based Plant Monitoring system to detect the growth of a plant to recommend treatments needed
- Used a Raspberry Pi to run a CNN efficiently to give predictions
- Built PCBs, Power Supply, Enclosures from the scratch to complete the project
- Industry related project

Emoji Prediction | *Python, Keras*

Jan 2019 – Feb 2019

- Developed a deep learning based framework to predict emojis for a given tweet
- Created a dataset using tweets for training

FPGA based Processor Design | *Verilog, Altera*

Mar 2019 – June 2019

- Built a processor from the scratch using a FPGA capable of downsample an image received through UART
- Developed a UART Transceiver from the scratch to send the image in and take the result out
- Used Altera DE2-115 Development Board to complete the task

BLE based indoor positioning | *C++, IoT, Keras, NodeRED, ESP32*

Dec 2019 – Feb 2020

- Developed the system using collected training data from BLE devices placed inside the building
- Trained the Machine Learning model using tree-based algorithms

CERTIFICATIONS

Machine Learning <i>MATLAB</i>	Coursera
Deep Learning Specialization - 5 Courses <i>Python, Keras, Jupyter</i>	Coursera
Understanding Deep Fakes with Keras <i>Python, Keras</i>	Coursera
AI for medical diagnosis <i>Python, Keras, Jupyter</i>	Coursera
Natural Language Processing Specialization - 4 Courses <i>Python, Keras, Jupyter</i>	Coursera
How to Win a Data Science Competition: Learn from Top Kagglers <i>Python, Keras, Jupyter</i>	Coursera
Neural Network Programming - Deep Learning with PyTorch <i>Python, PyTorch, Jupyter</i>	Deeplizard
Hello (Real) World with ROS – Robot Operating System <i>Python, ROS</i>	EdX
Robotics <i>Python, ROS</i>	EdX
Introduction to Flutter Development Using Dart <i>Flutter, Dart</i>	The App Brewery

COMPETITIONS

IEEE Xtream 14.0: Island - 10th – World - 157th – Team name - KOS
MoraXtream 5.0: Island - 1st – Team name - KOS
DataStorm 1.0: Island - 5th (Finalist) – Team name - KOS
Google Hash Code 2019: Island - 4th – World - 1776th – Team name - CryptoCrackers

NOTABLE ACHIEVEMENTS

Zonal Mathematics Competition <i>Gold Medalist</i>	2011
National Mathematics Competition <i>Silver Medalist</i>	2011
All Island school Music and Drama Competition <i>3rd Place</i>	2011
All Island Inter School Chess Championship <i>Winner – Board Prize – 4th Board</i>	2008
Common European Framework - Trinity College London <i>Merit A1</i>	2008
Speech and Drama - Trinity College London <i>Merit A1</i>	2008

TECHNICAL SKILLS

Languages: Python, C/C++, Java, MATLAB, R, GO, Dart (Basic), Verilog (Basic)
Frameworks: Springboot, Keras, Tensorflow, PyTorch, ROS
Developer Tools: Opencv, Git, Jupyter, VS Code, Visual Studio, PyCharm, IntelliJ, Eclipse, Altium, SolidWorks, Arduino

REFERENCES

Dr. Peshala Jayasekara

B. Sc. Eng. Hons. (Moratuwa), M.
Eng. (Tokyo), Ph. D (Tokyo)

Senior Lecturer

Department of Electronic and
Telecommunication Engineering –
University of Moratuwa
Email – peshala@uom.lk

Dr. Ranga Rodrigo

B.Sc.Eng.Hons. (Moratuwa, Sri
Lanka), M.E.Sc. (Western, Canada),
Ph.D. (Western, Canada), SMIEEE

Senior Lecturer

Department of Electronic and
Telecommunication Engineering –
University of Moratuwa
Email – ranga@uom.lk

Dr. Ajith Pasqual

B.Sc. Eng. (Moratuwa), M.Eng.
(Tokyo), Ph.D. (Tokyo), MIEEE,
MACM

Senior Lecturer

Department of Electronic and
Telecommunication Engineering –
University of Moratuwa
Email – pasqual@uom.lk