Sathira Silva

Department of Computer Engineering,
University of Peradeniya,
Sri Lanka 20400

I'm an enthusiastic, ambitious third-year computer engineering undergraduate who has developed a number of problem-solving skills, eager to secure an internship opportunity.

linkedin.com/in/sathira-silva
e17331@eng.pdn.ac.lk
sathirasofte@gmail.com
(+94)-77-600-7404
github.com/sathiiii
sathiiii.github.io

EDUCATION HISTORY

B.Sc.Eng(Hons) in Computer Engineering
University of Peradeniya | *Nov. 2018 - Present*
- GPA: 3.67 / 4.00

G.C.E. Advanced Level Examination
De Mazenod College, Kandana | 2003 - *2016*
- Comb. Maths (A)
- Physics (B)
- Chemistry (B)

ACHIEVEMENTS

IEEEXtreme 16.0 **2022**
Country Rank - 34, Global Rank - 768 / 6373
Team Name: bitLasagna2.0

ICDS Mini Hackathon **2021**
Rank - 5 / 100+
Team Name: bitLasagna

IEEEXtreme 14.0 **2020**
Country Rank - 2, Global Rank - 68 / 7000+
Team Name: InterGreat

ACES Coders **2020**
Rank - 14 / 100+
Team Name: bitLasagna

INTERESTS

Artificial Intelligence **Algorithms**
Deep Learning **Machine Learning**
Image Processing **Data Structures**
Natural Language Processing

TECHNICAL SKILLS

Languages: C/C++, Python, Java, JavaScript, HTML/CSS, SQL

Developer Tools: Visual Studio, Visual Studio Code, Eclipse, Jupyter Notebook, GitHub, Atom, IntelliJ IDEA

Technologies/Frameworks: OpenCV, TensorFlow, ReactJS, NodeJS, Bash Scripting, Jekyll

PROJECTS

Mar. 2022

Automatic License Plate Recognition
Technologies: Python, Image Processing, OpenCV, OCR

- Implemented a Python command line tool to detect and recognize Sri Lankan license plates from images.
- Used various image processing techniques to enhance the image quality.
- Used OpenCV to localize the license plate from the image and segment the characters from the license plate.
- Used OCR to recognize the characters from the segmented images.

Jan. 2022

Conversational Transformer Chatbot
Technologies: Python, NLP, Transformer, TensorFlow

- Implemented a Transformer model from scratch referring to the paper "Attention is All You Need" by Vaswani et al.
- Used the Cornell Movie-Dialogs Corpus to train the model.
- Used the model to build a conversational chatbot.

Jan. 2022

Sobriety Detection using Gyroscope Data
Technologies: Python, TensorFlow, Scikit-learn, NodeJS, ReactJS

- Analyzed gyroscope data by visualization using signal processing techniques.
- Data cleaning, pre-processing and feature extraction using various methods.
- Implemented machine learning and deep learning models to classify data.
- Contributed to developing a Node server to collect and process the data as well as to develop a prototype mobile application using ReactJS.

More Projects...

CERTIFICATIONS

Natural Language Processing 2022
Coursera
HSE University

Algorithms on Graphs 2020
Coursera
University of California, San Diego

Data Structures 2020
Coursera
University of California, San Diego

Convolutional Neural Networks 2020
Coursera
DeepLearning.AI

Neural Networks and Deep Learning 2020
Coursera
DeepLearning.AI

EXPERIENCE

Teaching Assistant: Programming Methodology
University of Peradeniya | May *2021 - Sep. 2021*

- Supervised weekly 2hr long online lab sessions.
- Created questions for online quizzes based on the C programming language.
- One-on-one sessions with students to tutor them on the C programming language concepts.

Volunteer Developer and Maintainer
University of Peradeniya | Nov. 2021 - Present

- Contributed to designing and developing a static website for the Embedded Systems and Computer Architecture Laboratory (ESCAL) using HTML, CSS, Javascript, jQuery, Bootstrap and Jekyll.

REFERENCES

Prof. Roshan G. Ragel
Head of Department,
Department of Computer Engineering,
Faculty of Engineering,
University of Peradeniya, Sri Lanka

Dr. Isuru Nawinne
Senior Lecturer,
Department of Computer Engineering,
Faculty of Engineering,
University of Peradeniya, Sri Lanka