

## INTERESTS

◇ Natural Language Processing ◇ Machine Learning ◇ Explainable AI ◇ Data Science

## EDUCATION

<b>University of Florida</b> Ph.D. in Computer Science Department of Computer and Information Science and Engineering GPA: 3.83/4.0	<i>Gainesville, Florida</i> 2022-Present
<b>University of Moratuwa</b> Honours Degree of Bachelor of the Science of Engineering Specialisation: Electronic and Telecommunication Engineering Dean's Honour List in Semester 1, 2, 6, 7 and 8. GPA: 3.66/4.2 (3.63/4.0)	<i>Moratuwa, Sri Lanka</i> 2015-2019
<b>DeepLearning.ai</b> Neural Networks and Deep Learning	<i>Coursera</i> 2019

## SELECTED PROJECTS

### **Automatic Error Visualizing and Analyzing Tool 2021**

A tool for classification, visualization and frequency analysis of translation errors of a Machine Translation system.  
Stack : Python, NLTK, Jupyter Notebook.

### **Improving Sinhala - English Machine Translation quality using Automatic Post Editing (APE) Techniques 2020**

Research on current APE techniques and implementation of a suitable APE system to improve Sinhala - English Machine Translation quality  
Stack : OpenNMT-py, OpenNMT-tf, Pytorch, Transformer model architecture.

### **Traffic light control system with Reinforcement learning 2019-2020**

Implementing a reinforcement learning agent to return adaptive traffic light time settings according to the existing traffic level.  
Stack : Python, Tensorflow, SUMO traffic simulator, Q-Learning.

### **Customer recommender solution for banking domain 2018**

A customer recommender solution with a useful feature that enables the bank to describe customer behaviors and generate insight through them was designed and implemented using the customer transaction and demographic data available in a given bank database.  
Stack : Python, PySpark, XGBoost, AWS virtual servers.

### **Prediction model for customer check-ins for Hotel management 2018**

Implementing a prediction model to predict the number of possible customer check-ins for a given day was designed and implemented to be used as a tool in hotel management processes.  
Stack : Python, Microsoft Azure, XGBoost.

## PUBLICATIONS

- Chathuri Jayaweera and Gihan Dias. Automatic Classification, Visualization and Analysis of Errors in Machine Translation. In Extended Abstracts of International Conference on Information and Automation for Sustainability (ICIAFS), pages 43-44. IEEE, 2021.
- Sutharsan, Mahendren, Shehan Rajakaruna, S. Y. Jayaweera, J. A. C. M. Jayaweera, and Subramaniam Thayaparan. Vision-Based Adaptive Traffic Light Controller for Single Intersection. In proceedings of the International Conference on Information Technology Research (ICITR), pages. 1-6. IEEE, 2020.

## ACADEMIC EXPERIENCE

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AUG - DEC 2022	Teaching Assistant <i>CAP4641 - Natural Language Processing</i>
JAN - APR 2023	<i>Department Of Computer and Information Science and Engineering, University of Florida</i>
FEB 2020 - SEP 2021	Graduate Research Assistant (Research grant: AHEAD) <i>Natural Language Processing Center (NLPC)</i> <i>Department Of Computer Science and Engineering, University of Moratuwa</i> Natural Language Processing
FEB 2020 - SEP 2021	Teaching Assistant <i>Department Of Computer Science and Engineering, University of Moratuwa</i> CS2032 - Computer Communications CS3032 - Computer Networks

## WORK EXPERIENCE

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SEP 2021 - JUN 2022	Cognius.ai <i>AI Research Engineer</i> Development of Intent Classification models for Conversational AI systems
JUNE - DEC 2018	Forestpin (Pvt.) Ltd. <i>Machine Learning Research Intern</i> Building Sales Prediction models for Sales of supermarket outlets and implementing an Inventory management model

## SKILLSET

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Programming Languages:	Python   R   SQL   Java
Softwares :	Weka   Matlab   SUMO
Familiar libraries and frameworks :	Pytorch   XGBoost   Opennmt-py   Opennmt-tf   Unity
Technical Skills :	Data Visualization, Preprocessing, Analysis and Modeling
Soft Skills :	Works well in team   Good at problem solving   Fast learner
Other :	LaTeX   Git   CSS   Flask   SolidWorks

## AWARDS & ACHIEVEMENTS

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2018:	India's first Bank-led Datathon organized by Yes Bank, India - 1st runner up and Best Student team award
2018:	Hackstat 2018, a Datathon organized by the Stat Circle of University of Colombo - 1st Place
2015-2019:	Dean's Honour List for outstanding academic achievements in Semester 1, 2, 6, 7 and 8.
2015-2019:	Mahapola merit scholarship for outstanding performance in GCE Advanced Level by the government of Sri Lanka.
2014:	Sri Lankan Physics Olimpiad Competition - Merit Award

## PROFESSIONAL AFFILIATIONS AND ACTIVITIES

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- IEEE WIE Member
- Institution of Engineers, Sri Lanka (IESL) member
- Rotaract club of University of Moratuwa (2016-2018)