# YASAS SENARATH

Doctoral Student / Graduate Research Assistant George Mason University, Fairfax, Virginia, USA

#### **EDUCATION**

# Volgenau School of Engineering

George Mason University, United States

· Ph.D. Student (Information Technology)

· Lab: Humanitarian, Semantics and Informatics Lab

# Department of Computer Science and Engineering

University of Moratuwa, Sri Lanka

· Honours Degree of Bachelor of Science of Engineering

· Enlisted in Dean's List in all semesters in the Department of Computer Science and Engineering

#### **EXPERIENCE**

# Graduate Research Assistant

Aug. 2019 - Present

Aug. 2019 Present

Current CGPA: 4.0/4.0

Jan. 2014 Jan. 2018 Overall GPA: 3.95/4.20

Humanitarian, Semantics and Informatics Lab (Human-Info-Lab)

George Mason University, US

· Analyze Natural and Societal Crises in Social Media.

#### Graduate Research Assistant

Jan. 2018 - Jul. 2019

Data Science, Engineering and Analytics Research Hub (DataSEARCH) University of Moratuwa, LK

· Research on Fine Grained Emotion Analysis of Tweets

### Visiting Instructor

Jan. 2018 - Jul. 2019

Department of Computer Science and Engineering

University of Moratuwa, LK

· Visiting Instructor of Subjects: Machine Learning, Data Science, Advanced Algorithms, Data Structures and Algorithms, Object Oriented Programming, Presentation Skills

#### Trainee Software Engineer

Jul. 2016 - Dec. 2016

Undergraduate Internship

CodeGen International (PVT) Ltd., LK

· Research on Opinion Extraction of Reviews on Points of Interest (POI).

#### RESEARCH PROJECTS

### Identifying Hate Intent in Social Media Streams

Aug. 2019 - Present

Graduate Research Assistant, Human-Info-Lab

George Mason University, VA, USA

· Study on identifying specific types of hate speech in social media.

## Affect Level Opinion Mining of Twitter Stream

Jan. 2018 - Jul. 2019

Graduate Research Assistant, DataSEARCH

University of Moratuwa, Sri Lanka

- · Studied the impact of multiple word embedding models to measure emotional intensity in tweets
- · Initiated sub-project to construct a tweet corpus for emotional analysis in Sinhalese

# **Aspect Based Sentiment Analysis**

Jan. 2017 - Dec. 2017

Undergraduate, Final Year Project

University of Moratuwa, Sri Lanka

- · Developed supervised aspect extraction techniques combined with superior pre-processing and features.
- · Experimented on the capabilities of deep learning techniques such as CNN and RNN for aspect extraction.

#### **PUBLICATIONS**

# Evaluating Semantic Feature Representations to Efficiently Detect Hate Intent on Social Media

Y Senarath, H Purohit

IEEE International Conference on Semantic Computing (IEEE-ICSC)

2020

· Presents an Extensive Empirical Analysis of Features for Detecting Hate Speech on Social Media.

### ACTSEA: annotated corpus for Tamil Sinhala emotion analysis

R Jenarthanan, Y Senarath, U Thayasivam

Moratuwa Engineering Research Conference (MERCon)

2019

· Presents a dataset and analysis on using keyword based emotion analysis for two low resource languages in Sri Lanka.

### A Hybrid Approach for Aspect Extraction from Customer Reviews

Y Senarath, N Jihan, S Ranathunga

International Journal on Advances in ICT for Emerging Regions

2019

· Presents a Mixture of Classifiers Model for Aspect Extraction.

# DataSEARCH at IEST 2018: Multiple Word Embedding based Models for Implicit Emotion Classification of Tweets with Deep Learning

Y Senarath, U Thayasiyam

Workshop on Computational Approaches to Subjectivity, Sentiment and Social Media Analysis (WASSA)

2018

· Presents a Novel Deep Learning Model for Implicit Emotion Identification.

# Aspect Extraction from Customer Reviews Using Convolutional Neural Networks N Jihan, Y Senarath, S Ranathunga

International Conference of Advances in ICT for Emerging Regions (ICTer)

2018

· Presents a Multi-Channel Convolutional Neural Network for Aspect Category Detection in Aspect Based Sentiment Analysis.

#### Multi-Domain Aspect Extraction using Support Vector Machines

N Jihan, Y Senarath, D Tennekoon, M Wickramarathne, S Ranathunga

Conference on Computational Linquistics and Speech Processing (ROCLING)

2017

· Presents an Aspect Extraction Technique Based on Support Vector Machines and a set of Novel Features.

#### HONORS AND AWARDS

CINTEC Award 2018

· Awarded for the undergraduate with the highest grade for the Final Year Project at Department of Computer Science and Engineering , University of Moratuwa, Sri Lanka.

#### Gold Award for Most Outstanding Digital Communication Project

2018

· Awarded by Rotaract District 3220 Sri Lanka & Maldives at the 28th Rotaract District Assembly held on 08/07/2018 for the Community project TrainLK.