ARJUN **RAVIKUMAR**

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EDUCATION

Rochester Institute of Technology

Rochester, NY, USA

Master of Science in Computer Science

August 2019 - December 2021 (Expected)

Current CGPA: 3.96 / 4.0

Relevant Coursework: Foundations of Algorithms, Foundations of Computer Vision, Introduction to Machine Learning, Big Data Analytics, Neural Networks and Machine Learning, Data Cleaning and Preparation, Engineering Cloud-Based Software Systems.

Awarded 75% scholarship for Spring and Fall semester 2020 by the CS Department selected from over 300 students based on academic success, technical prowess and leadership potential.

Mahatma Gandhi University

Kerala, India

Bachelor of Technology

Major in Computer Science and Engineering

August 2011 - June 2015

WORK EXPERIENCE

Graduate Assistant - System Administrator at Rochester Institute Of Technology, Rochester, NY

January 2020 - December 2020

- Assisting the systems administrators in helping over 1000 faculty and students with issues related to systems, servers and user accounts.
 Maintenance and troubleshooting of over 250 systems and servers part of the Computer Science Department.
- Implemented analytics and monitoring tool (Grafana, Prometheus) for over 150 machines part of the Computer Science department of RIT.
- Designed and implemented load balancer servers (HAProxy) across more than 150 machines part of the Computer Science department of RIT.

Game Programmer - R&D at Ruby Seven Studios Inc., Kerala, India

May 2017 - July 2018

- Reduced the production time by 80% by developing multiple applications for art tasks using **Python**, **JSX** (Adobe Photoshop).
- Managed a team of 3 to develop the Multi-Strike Poker game on Facebook Instant Games platform.

Junior Game Programmer at Ruby Seven Studios Inc., Kerala, India

June 2015 - May 2017

- Developed TropWorld Casino, Lucky North Casino, Bestbet Casino (ActionScript) in a team of 5.
- Developed over 20 Slot machines, created a new purchase engine for the games, and integrated multiple external Ad frameworks.
- Reduced the load time of games by 75% by restructuring the loading process.
- Converted existing Flash games to HTML5 (JavaScript).

SKILLS

- Programming Languages: Python, Java.
- Big Data and Machine Learning: MySQL, MongoDB, DynamoDB, Python (NumPy, Pandas, Scikit-learn, Matplotlib, Seaborn, PyTorch), Computer Vision, Convolutional Neural Network, Deep Learning, Supervised Learning, Unsupervised Learning, SQL, NoSQL.
- Other: Front-End Development, Back-End Development, Full Stack Development, Gradle, DevOps, AWS, Terraform.

PROJECTS

Fake News Prediction with Keywords Identification (Python)

February - May 2021

• Created a website to predict real and fake news using the RoBERTa model. Designed and implemented a novel method of highlighting the most important words in the news which influenced the prediction of the model along with the authenticity of the news.

Mask-Up (Python) March - April 2021

- Designed and implemented cloud based application on "Wegaman's Customer Line" footage from youtube using AWS technologies like EC2, Lambda, Amplify, CloudFormation, S3, DynamoDB, SNS.
- System detects individuals who haven't worn masks properly and reports them to the concerned stakeholders. Also created an easy to understand front-end website for viewing real time footage with color coded annotations of their mask status around all individuals.

GPS Data Visualization, Turn and Stop Sign Prediction (Python)

October - November 2020

- Cleaned the raw data and reduced the file size to 8% of the original GPS data file received from an Arduino device.
- Utilized python to implement an unsupervised learning method to find out the number of stop signs, left turns and right turns in and around RIT.

Handwriting Prediction (Python)

October - November 2020

• Designed and developed a supervised learning method to predict handwritten digits from MNIST database with a test accuracy or more than 92%. (60,000 - train dataset; 10,000 validation dataset).

Language Classifier (Python)

March - April 2020

• Utilized python to implement multiple supervised learning techniques to predict the language of given text based on a set of features with accuracy of more than 98% (5,100 lines - train dataset; 1000 lines validation dataset).

Adaptive Profile Changer Android Application (Java)

July - December 2014

• Designed and developed an android application that changes the sound profile of the mobile device according to the current GPS location.