## Sarath Patlolla

250 Buckingham avenue, Syracuse. NY, USA 13210

Phone no. +1(315)-728-8587, Email id: patllola.sarath@gmail.com,

GitHub: https://github.com/sarathreddy1992, website: https://sarathreddy1992@github.io,

### **Education**

Syracuse University Dec 2018

Master of Science in Computer Engineering

**Coursework**: Advances in Deep Learning, Object Oriented Design, Introduction to Data Science, Big Data Specialization, Advanced Data structures, Software Modelling and Analysis, Machine Intelligence with deep learning, Internet Programming.

# **Relevant Work Experience**

Precision Vision Feb 2018- Present

- Worked on performing object detection and object identification by the image acquired from cameras installed on drones.
- Simulated a real time flight movement and the path trajectory by drone and gimbal respectively.
- Programmed GigE cameras and servos for image acquisition and gimbal movement attached on drone.
- Micro-Controller programming for testing the transfer of data packets between servo and ground station.
- Automated flight movement by configuring the various parameters for different flight movements.

Nord Infotech Aug 2013-Nov 2016

- Worked on building a web application (Internal Portal) that provided visibility of the company activities to all the employees and worked on building automatic scripts that would optimize work.
- Worked on creating an "outbound calling services" on creating a calendar to interviewer by TA team.
- Administering and helping to manage PPC media strategies for the client quickly and understand and support initiatives that would contribute to the goals and success of client campaigns.
- Worked on Implementation and integrating between Oracle ERP and third-party systems.
- Worked on building custom application which resides in the server.
- Worked on data conversion and building custom flow to handle SLA monitoring
- Worked for the client "Scholastic PS" for enhancing their search page to provide additional search criteria.

## **Language and Skills**

**Languages:** Python (Proficient), C, C++, C#, JAVA, HTML5, CSS, JavaScript, Flask, Node.js, Mongo DB, Express.js, Django

**Skills:** Amazon web Services (AWS), Google Cloud Platform (GCP), Bigdata, TensorFlow, Hadoop, PL/SQL, Deep Learning, Spark, HDFS, HIVE, Tableau, Data-Munging and Data Pre-Processing, Visual Studio, SQL server Studio, NoSQL, Cassandra DB

# **Personal/Academic Projects**

Directors Take Spring 2018

• Developed a machine learning model to predict the success rate of a movie directed by a director, which were based on his previous movie directions.

Skills: Python, Data Cleaning, Data Processing

# **Facebook Data Analysis**

**Spring 2018** 

 Made many insights into Facebook profile by analysing personal Facebook data that was made available for download.

Skills: Python, Data Analysis, Data visualization

## **Adversarial Attacks on CNN Based Malware Detection Systems**

**Spring 2018** 

• Developed Adversarial examples of clean malware binaries using various techniques such as JSMA, L-BFGS, ATN and C&W attack and fooled the CNN based malware detection systems by forcing them to misclassify as other malware or a clean file.

Skills: Python, Google-TensorFlow, NumPy

#### **Neural Machine Translation**

Spring 2018

• Implemented a neural machine translation using Recurrent Neural Network (RNN) to translate a given English sentence to Vietnamese language, vice-versa and calculated the BLEU score for the translation

Skills: Python, RNN, Google-TensorFlow

# e-Learning Website

Spring 2018

• Built an e-learning website where the users can login via Facebook authentication and enrol to learn the courses which were available on that website. The users can also add courses and become tutors for any course, course review and live chat feature was also implemented.

Skills: HTML 5, CSS, JavaScript, Mongo DB, Express.js, Node.js

# **Fast Style Transfer Using Perceptual Loss**

Fall 2017

• Trained a Feed Forward Neural Network for image transformation tasks using perceptual loss functions that depend on a high-level feature from a pre-trained (VGG 19) loss network.

Skills: Python, Google-TensorFlow, NumPy, CNN

## **Health Care Centre Database**

**Fall 2017** 

• Designed, Implemented and tested a Database for a health care system.

Skills: MySQL

Remote Build Server

Fall 2017

• Designed a build server that supports continuous integration, i.e. whenever new code is added into the system, the code is tested and build in order and the context of it which calls it. As soon as the test pass, we check in the system and that becomes a part of the current base line of the code.

Skills: C#, WPF, WCF, XML, Socket Programming

#### Remote Code Publisher

Spring 2017

- Designed a message passing communication system between the Sockets. The communication provided the support for passing the HTTP style messages using asynchronous one-way message passing.
- The communication supports sending and receiving streams of bytes.

**Skills:** C++, XML, Socket Programming

# **Type Based Dependency Analysis**

**Spring 2017** 

• A code analysis tool which analyses the dependencies among the source code files and stores them in a NoSQL database.

Skills: C++,

### **Document Handling System**

**Spring 2017** 

• Developed a Microsoft like word handling system which supported spell check, word suggestion, auto completion and document retrieval features using data structures such as hash table, tire.

**Skills:** C++, Data Structures