

Sarath Patlolla

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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 images which were acquired by different filter cameras installed on drones.
- Simulated a real time flight movement and the path trajectory of drone and gimbal set up on it.
- Programmed GigE cameras and servos for image acquisition at different frame rates by different filters and gimbal carrying those cameras.
- 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

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

Personal/Academic Projects

TeraSort on Hadoop MapReduce and Spark on AWS

Summer 2018

- Implemented 1TB sort program of Hadoop MapReduce and Spark Framework on 1 node and 16 nodes of AWS EC2.
- Initiated and implemented scripts for automatic configuration and deployment of Hadoop framework for 16 nodes

Skills: Hadoop, Map Reduce, AWS

Recommendation System

Summer 2018

- Designed a network-based recommendation engine using Map-Reduce to run on top of Hadoop

Skills: Hadoop, Map Reduce

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

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