

Vineeth Chennapalli

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Experience

Precision Silver LLC

Gainesville, Florida

SOFTWARE ENGINEERING INTERN

Jun 2018 - Aug 2018

- **Machine Learning | Python:** Implemented and incorporated possibilistic K-Nearest Neighbors Classifier for **outlier detection** based on threshold value. This resulted in an improved **pixel classification** while also needing about **15% fewer input samples** than pre-existing algorithm.
- **Web App Development | JavaScript, Python:** Developed a Leaflet.js based map viewer application to show various crop related features estimated by machine learning algorithms on 3D images of agricultural plots.

Sonus Networks

Bangalore, India

SENIOR SOFTWARE ENGINEER

Aug 2015 - Mar 2017

- **Full-Stack Development | JavaScript, Python:** Individually developed a sleek web-based **sizing tool** for Sonus's core product that maps users' exclusive network load demands to hardware requirements in minimal time (< 200 ms) by efficiently using infrastructure heuristics.
- **Web App Development | JavaScript, Python:** Designed and implemented a user-friendly front-end along with the necessary APIs for an in-house packet generator tool to provide a centralized platform to execute tests and track real-time stats.

Projects

Hardware Resource Allocator

Sonus Networks

PLATFORM ENGINEERING · PYTHON

Feb 2017 - Jun 2017

- **Independently formulated** and incorporated a **resource allocation algorithm** that orchestrated efficient distribution of product's resources among its component units and thereby contributed towards improving the **network throughput** by **15%** on average.
- Collaborated and developed the software for Sonus's core product which aided in its movement from hardware propriety domain to customer domain (virtualized/cloud).

Duplicate Question Pairs Identification

University of Florida

DEEP LEARNING · PYTHON

Feb 2018 - May 2018

- Created an efficient model (in a team of three) to detect semantically identical question pairs using **LSTM networks** and Siamese architecture.
- Trained and tested model on Quora dataset (**> 1.4 million records**) and obtained **87 % accuracy** on validation data and **0.18 log loss** on test data.

POC Compiler

University of Florida

JAVA

Jan 2018 - Apr 2018

- Developed compiler for custom image processing language using Java libraries. Utilized ASM byte code framework to generate Java byte code.
- Implemented a scanner, parser, abstract syntax tree generator, type checker and a code generator to generate JBC for the custom language.
- Comprehensively tested the code during every step of development phase on more than **300 JUnit test cases**.

Spatial VR

SwampHacks IV

UNITY · JAVASCRIPT

Jan 2018

- Developed a VR game (in a team of three) using **Oculus Rift** for people with Spatial Hearing Disorder in under 36 hrs with no prior experience.
- Integrated it with a full-stack web application to provide **real-time feed** and visualization of the performances to the users, and doctors.
- Won the Entrepreneurial Spirit Award, a sponsorship prize for developing an excellent solution to a common problem.

In-Memory B-Plus Tree Implementation

University of Florida

JAVA

Oct 2017

- Developed B+ tree that performs range search operations on large scale datasets (**10 million records**) using basic data structures in optimal time.
- Supported insertion, absolute key search, and range key search operations.

Education

University of Florida

Gainesville, Florida

MASTER OF SCIENCE IN COMPUTER SCIENCE

Aug 2017 - May 2019

- Cumulative GPA: 3.56/4.0

Manipal Institute of Technology

Manipal, India

BACHELOR OF TECHNOLOGY IN ELECTRONICS & COMMUNICATION ENGINEERING

Aug 2011 - May 2015

- Cumulative GPA: 8.45/10.0

Skills

Languages

Python, JavaScript, Java, Elixir, SQL, MATLAB, Bash

Frameworks & Tools

Keras, Tensorflow, NumPy, SciPy, MongoDB, Bottle, Git

Web Technologies & Frameworks

React, Leaflet, jQuery, Webpack, AJAX, HTML5, CSS3

Technologies & Platforms

Linux, Docker, AWS