niket Devle

Education

MS in Computer Science

Jan. 2021 – Present Arizona State University

GPA: 3.95/4.0

Bachelor Of Technology in Electrical Engineering

Aug. 2015 - May 2019

Veermata Jijabai Technological Institute

GPA: 7.29/10

Experience

Sensagrate LLC June 2021 - Aug 2021

Software Development Intern

- Built a Python application for analysis and prediction of near-miss collisions using Signal Phase and Timing data.
- Annotated pedestrians and vehicles in a LIDAR point cloud dataset using understand.ai.

Center of Excellence (COE-CNDS) VJTI

Sep 2019 - Dec 2019

Student Intern

Mumbai

- Cleaned the data available from SNORT systems using Sklearn.
- Designed a model to predict cyber-attacks on a power grid using SVM, Naive Bayes and Random Forest.
- Worked on classification of cyber-attacks and system faults.

Technical Skills

Languages: Python, Java, C++, JavaScript, MySQL, PostgreSQL.

Technologies: Sciket-learn, TensorFlow, Keras, HTML, CSS, Flask, ROS, D3, Seaborn, Matplotlib.

Developer Tools: AWS, Amazon EC2, Vs Code, Github, Jupyter Notebook, Confluence, Jira, Google Trends.

Projects

Multimedia Retrieval System | LSH, VA files, Decision Tree, SVM

Nov 2021

- Developed a multimedia retrieval system using Locality Sensitive Hashing and Vector-approximation files.
- Implemented PCA and SVD for dimensionality reduction on features extracted using color moments, local binary patterns, and HOG on images.
- Coded SVM and Decision Tree classifiers to improve Nearest Neighbor search results using relevance feedback.

Analysis of Newspaper Propaganda Biases | D3, JavaScript, python

Nov 2021

- Built a system for visualizing bias in newspapers articles by creating a bubble chart, stream graph of propaganda techniques, and word cloud for an article.
- Efficiently fetched propaganda techniques using PRTA API by reducing the number of calls to fit the call frequency limits.

Movie Recommendation system | KNN, Collaborative filtering

Nov 2021

- Performed Exploratory Data Analysis on the Movie Lens dataset.
- Implemented a movie recommendation system using a content-based and collaborative filtering-based approach.

Botnet Detection on Social Media | CLBS

Apr 2021

- Implemented Coordinated Link Sharing Behaviour (CLSB) on Twitter's UK elections dataset.
- Achieved 78 percent recall and 97 percent accuracy for bot detection on highly skewed dataset.
- Identified the accounts that are most amplified by the bots during 2016 UK elections.

Pursuit Evasion Game | Python, OpenCV, YOLOv3, Gmapping, Gazebo

Mar 2021

- Successfully built a human detection and following system using YOLOv3 for an evader and a pursuer simulated in Gazebo.
- Created maps for two distinct environments using SLAM, Gmapping and ROS.

Stereo Camera Calibration and Depth Sensing | OpenCV, Image Processing

Feb 2021

- Created an Python application using OpenCV and PyCharm to calculate intrinsic parameter of the stereo camera.
- Performed analysis on the images to calculate depth of each pixel in an image using disparity map.

Maximum Intensity Light Tracker | C++, Arduino Uno

Mar 2019

- Engineered an Arduino-controlled robotic arm to align solar panels towards maximum intensity of light using LDR.
- Improved the overall power output of the solar panels by up-to 40 per cent.

Extracurricular

- Completed Python3 Specialization(Coursera).
- Completed Machine Learning certification(Coursera).