

Chinmay Wyawahare

7503 3rd Avenue 3rd FL Brooklyn 11209

☎ (917) 349-3674 | ✉ cnw282@nyu.edu | 🏠 gandalf1819.github.io | 📍 gandalf1819 | in chinmaywyawahare | 📞 live:e56228739586f9a7

Education

New York University, Tandon School of Engineering

MASTER OF SCIENCE IN COMPUTER SCIENCE

Brooklyn, New York

May 2020

Vishwakarma Institute of Technology

BACHELOR OF TECHNOLOGY IN COMPUTER ENGINEERING

Pune, India

May 2018

Skills

Languages Python, R, Java, Go

Libraries Numpy, Pandas, Scikit-learn, seaborn, Keras, Pytorch, Tensorflow, Matplotlib, ggplot2, Networkx, H5py

Operating Systems MacOS, Linux, Windows

Frameworks Spring MVC, AWS, GCP, Docker, Flask, Kubernetes

Web Technologies Javascript, D3, Node.js, HTML, PHP

Development Tools Visual Studio Code, Jupyter Notebook, IntelliJ, PyCharm, Atom

Databases MySQL, MongoDB, HBase, Redis

Software Tools Tableau, Weka, Adobe Photoshop, Adobe Illustrator, Microsoft Office

Experience

High Speed Networking Lab, Department of Electrical and Computer Engineering, New York University

Brooklyn, New York

GRADUATE RESEARCH ASSISTANT

January 2019 - Present

- Working on 5G based Vehicle-to-Everything (V2X) communication technology to improve the performance of automated driving and the ability to manage vehicle intersection
- Designed 'Vehicle Intersection Traffic Management System' to improve the latency and throughput of the intersection
- Developed a gym environment to observe the car simulation at the intersection using SUMO traffic simulator
- Implemented Reinforcement Learning algorithms for Lane Advising in Roadrunner for Vehicle Traffic Management
- Integrated SUMO traffic simulation package with gym environment to visualize the results of the reinforcement learning algorithms

Mother's Masala

Pune, India

TECHNICAL HEAD

August 2016 - May 2018

- Mother's Masala is a social startup aimed at socio-economic upliftment of underprivileged women
- Developed an online portal for customers for ordering food from the website
- Spearheaded graphic designing for social media outreach

Rabbit and Tortoise Technology Solutions

Pune, India

SOFTWARE DEVELOPMENT INTERN

June 2017 - November 2017

- Developed a chat-bot using Node.js and Python by employing NLP and ML techniques
- Designed web applications for employee on-boarding process using Javascript, MySQL under Spring MVC architecture using RESTful APIs
- Engineered an IDE for Machine Learning using C# WPF and remodeled ML algorithms in Python

Effnet AB

Luleå, Sweden

WEB DEVELOPMENT INTERN

January 2016 - February 2016

- Redesigned the website using HTML5, CSS, PHP and Bootstrap and developed a responsive version
- Provided backend connectivity using PHP and MySQL

Projects

AidData Core Research Release

- Visualized AidData's dataset which includes commitment information for over 1.5 million development finance activities funded between 1947 and 2013, covers 96 donors, and includes ODA, OOF flows, Equity Investments, and Export Credits
- Developed d3 visualizations like Heatmaps, Line charts, Adjacency matrix and Dorling cartograms to visualize the donor-recipient relationship on AidData attributes

Webber

- Developed a distributed systems application like twitter in Go using etcd Raft library and Protocol Buffers
- Implemented Raft consensus algorithm for leader election, log replication, handle node failure mechanism
- Created 3 microservices involving communications using gRPCs

Map Reduce RPC and Log Replication using View Stamped Replication

- Implemented a distributed map-reduce system in Go by creating master worker which assigns map and reduce jobs to a set of workers
- Handled worker failure mechanism by using RPC package for communication between servers
- Implemented Go routines and channels to achieve concurrency between workers
- Implemented a primary backup replication protocol wherein the primary service replicates the logs across collection of servers and can withstand network failure, as long as majority of servers are working

Comparative Study of Reinforcement Learning Algorithms on Ping Pong game

- Performed comparative study of Q-learning, Deep Q Network, and Policy Gradient on Ping Pong game environment to observe the best performance
- Designed new game environment for Android game platform for the games Subway Surfers and Flappy Bird and implemented a Deep Q-Learning agent into newly created environment

Stock Market Sentiment Analysis and Identification of Stock Trend

- Performed sentiment analysis of the news articles published for the company and identified trend in stock prices by comparing the sentiment scores and actual prices
- Utilized ggplot2 for plotting graphs and Weka for checking the accuracy of the model by applying Naive Bayes, OneR and Random Forest classification techniques

Playlist Classification on Spotify using KNN and Naive Bayes Classifier

- Scraped data from Spotify Web API and identified features of the audio track
- Implemented Machine Learning algorithms like Naive Bayes Classification and K-Nearest Neighbours Classification algorithms to classify audio tracks in their genres

Risk Factor Identification using Truck Fleet Sensor Data

- Computed truck mileage, driver risk factor using Hive and Pig to understand the risk the company is under from fatigue of drivers and over-used trucks and visualized the sensor data using Tableau to observe the impact of the factors on driver's performance

Certifications

Neural Networks and Deep Learning

DEEPLARNING.AI

Coursera

May 2019 - Present

- Logistic Regression with a Neural Network mindset
- Planar data classification with one hidden layer
- Building your Deep Neural Network
- Deep Neural Network Application - Used logistic regression to build cat vs. non-cat images

Applied Data Science with Python

UNIVERSITY OF MICHIGAN

Coursera

May 2019 - Present

- Data pre-processing on All Time Olympic Games Medals data and United States Census Bureau data
- Working with Energy supply and renewable electricity production data from the United Nations for the year 2013 in Pandas dataframe
- Hypothesis Testing - Ran a t-test to compare the ratio of the mean price of houses in university towns the quarter before the recession starts compared to the recession bottom

Deep Learning in Python

DATA SCIENTIST WITH PYTHON TRACK

DataCamp

April 2019 - Present

- Optimizing a neural network with backward propagation
- Building deep learning models with Keras
- Fine Tuning digit recognition model built in Keras