# **ANIRUDH** RAMCHANDRAN

## **EDUCATION**

Master's in Electrical and Computer Engineering, University of California, Davis, CA

expected Dec 2021

Relevant Coursework: Recommender Systems, Reinforcement Learning, Data Science, Stats and Web technologies for Data Science, Data in the Built Environment, CSCW, and social computing

**Leadership:** Graduate Teaching Assistant and Graduate Research Assistant

Bachelor's in Electrical and Electronics Engineering, DSCE, Bangalore, India

August 2015- May 2019

Relevant Coursework: Python Programming, C++, Intro to Java, Embedded C | Honours: 8th Rank in Department

## **TECHNICAL SKILLS**

Data Visualization, Machine Learning, Web-Dev, Statistics, Reinforcement Learning

Languages/Technologies: Python, R, SQL, HTML, JavaScript, CSS, C++, Git, MATLAB, Power BI, AWS

Toolbox: Pandas, ML-Lib, Scikit-Learn, Flexbox, D3.js, Flask, Keras-TensorFlow

#### **RELEVANT EXPERIENCE**

## Data Analyst Intern-TÜV SÜD GLOBAL RISK CONSULTANTS

Remote | June 2021-Present

Designed a front-end client-facing dashboard using PowerBI to visualize different factories across the globe and provide relevant information for each of them. Automated the update of the dashboard data using SQL queries.

#### **Graduate Student Researcher- UC DAVIS**

Davis, CA | January 2021-Present

- Designed and built a dashboard using HTML, CSS, JavaScript to provide technical longitudinal information of Open-Source projects from the Apache Software Foundation incubator (ASFI)
- Designed visualizations using d3.js to show monthly developer email networks & their file committing habits in a particular project. Project proposal was accepted in the ApacheCon 2021.

#### Data Analyst Intern - Schneider Electric

Bangalore, India | January-May 2019

- Set up a SQL database for the collection of near-miss accidents and other incidents on the factory floor. Performed visual and exploratory analysis to gain insights, which helped reduce accidents by 2% in the following months.
- Presented results to the team and wrote requested executive summary detailing strategy to help reduce factory downtime to present to end clients and senior leadership.

## **ACADEMIC AND PERSONAL PROJECTS**

**Data Science Salary Predictor** [Python, Selenium, pickle, flask]

March-June 2021

- Created a tool that helps estimate the data science salaries with a MAE \$15,000 based on a mixed inputs model in Keras.
- The model takes into account the job description as a tokenized data and also takes other factors like location, seniority, etc.

Stock Price Forecasting and Clustering based on Trading pattern [R,Python,Prophet,K-means,GMM,plotly]

- Using K-means and Gaussian Mixture Models to cluster 51 random companies, also designed time series models using Prophet to forecast adjusted closing prices for any given stock based on its historical data.
- The resulting clusters showed resemblances in sectors, price-to-earnings ratios, and the forecasted price gave insights that can be exploited to improve planning and get to more comprehensive decision-making about companies.

**Developer Name Disambiguation (de-aliasing) on Apache Software Foundation(ASFI):** [Python ,Bs4,K-means, Sklearn] Sept-Dec 2020

- Scraped the developer names, emails of 330 projects present in the ASF using **BeautifulSoup4**, then performed the necessary pre-processing steps to create a clean data set.
- Programmed clustering models: to correctly find full author name given only project name, finding developers' hidden email id, and clustering similar author/developer names. Models demonstrated an accuracy of 90% upon assessment.

## **Bitcoin Price Prediction using RNN** [Keras, Python, RNN]

June 2020.

Implemented a Recurrent Neural Network to forecast the Price of Bitcoin; the model showed an MAE of \$ 600. Also, illustrated the variation in the actual closing value visually and predicted closing value.

## **Solving Adaptive 2048 using Deep Q learning:** [Python, CNN, Open AI Gym]

March 2020

- Remodelled the popular sliding block game '2048' to hinder the player from using already known strategies for winning the game.
- Implemented an intelligent Q learning agent with a 5-layer end-to-end, Deep learning-based neural network to learn game control policies, which enabled the agent to secure a scores of 512 and above.

## **CERTIFICATIONS**

## BCG-Gamma Data Science & Advanced Analytics Virtual Internship Program

June 2021

Developed a predictive model using **XGboost** to predict customer churn rate and predict the **main factors behind customer churn**.