

Arnav Chhabra

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EDUCATION

M.Eng. in Computer Science and Applications – *Virginia Tech*, Blacksburg, Virginia, USA

AUG 2021 – CURRENT

GPA : 3.90

B. Tech - Computer Science Engineering – *PES University*, BANGALORE, INDIA

Aug 2016 – May 2020

GPA: 8.95/10.0

PROJECTS

Multi Task Learning for financial forecasting

APRIL 2020 – *PES University*

Built a multi-task learning model to predict the stock prices of multiple stocks simultaneously. Used yahoo finance APIs to extract stock data of various companies. Used a stock selector to find the correlation stocks using dynamic correlation. Classified the stocks prices using GRU cells as part of the multi task learning model to predict the stock prices.

Combining knowledge engineering with machine learning

DECEMBER 2019 – *PES University*

Knowledge Engineering and Machine Learning are both established fields, but each is different in its own way. In this work, we hypothesize that Knowledge Engineering when combined with Machine Learning performs better. To implement this we used Babelfy and Conceptnet Numberbatch tools that use knowledge graphs to get the extra knowledge required for more accurate classification.

Predicting stock prices of companies using sentimental analysis of tweets using NLP techniques

MAY 2019 – *PES University*

Used a combination of Kaggle and twitter search APIs for the tweet dataset and used Yahoo finance for the stock prices of the companies. To pre-process the tweets which were present in the dataset we performed basic steps of pre-processing the text in natural language. Finally, we decided to go for a random forest regression model which performs well on our small dataset.

EXPERIENCE

Associate Software Engineer – *BlueJeans By Verizon(Under Contract)*, Bangalore, India

AUGUST 2020 – JULY 2021

Worked on automation framework to meet the future demand of Video conferencing product from Blue Jeans Network. The work involved developing a framework for API automation to simulate real-world scenarios of the product. Used Java, Javascript, Gradle, and Cucumber tools to complete the above tasks.

Final Semester Internship – *Blue Jeans Network*, Bangalore, India

JANUARY 2020 – AUGUST 2020

Developed UI automation for the “BlueJeans meeting” product which is used for videoconferencing and was part of the releases during COVID as demand for the product and traffic increased rapidly.

R&D Summer Internship – *Blue Jeans Network*, Bangalore, India

JUNE 2019 – AUGUST 2019

Worked on a classic concurrency problem where multiple automation processes were competing for the same resources for the testing of the video conferencing product. As a solution, I had replaced the existing file-based configurations with an automated database. To achieve this automation I used REST APIs to create a microservice using Python Flask integrated with Mongo DB.

R&D Summer Internship – *IIT Ropar*, Bangalore, India

JUNE 2018 – JULY 2018

Worked under an IIT professor in the Computer Science department on research to optimize the scheduling algorithm used in Fog computing. Developed simulations for Fog computing environment to identify the latency when requests are sent to the cloud network instead of the intermediate nodes for processing. The research work proposed to use peer to peer scheduling to overcome the latency problem.

PUBLICATIONS

“Multi Task Learning For Financial Forecasting”

MAY 2021 – *Springer AISC*

“Learning Beyond Dataset By Combining Knowledge Engineering With Machine Learning”

APRIL 2020 – *IEEE*

TECHNICAL SKILLS

Languages

Python (Scripting, Flask, Tensorflow, Keras), R, Java, Javascript, Web Technologies(CSS, PHP, HTML, Vue.js)

Cloud Technologies

AWS Athena, S3, EC2, RDS, SageMaker, Google Collab

Development/Automation tools

IntelliJ, Visual Studio, Jenkins, Bitbucket, JIRA, Confluence, Agile process, Postman, Puppeteer, Appium, Selenium, Winium, Cucumber, Jupyter Notebook.

Relevant Courses

Data Analytics, Machine Learning, Linear Algebra, Natural Language Processing, Cloud Computing, Data Structures, Theory of Algorithms, Operating System, Databases(SQL, MongoDB), Probability & Statistics