Atharva Bhagwat

New York, New York atharva.bhagwat42@gmail.com

EDUCATION

Master of Science in Computer Science, New York University.GPA: 3.63Sept 2021 - PresentBachelor of Science in Computer Engineering, University of Pune.GPA: 8.45Aug 2016 - May 2020

TECHNICAL SKILLS

Languages and Libraries Python, MySQL, R, OpenCV, Tensorflow, Pandas, Numpy, Scikit-Learn, Flask, PyTorch

Tools and Services Google Cloud Platform, PuTTY **OS and Version Control** Linux, MacOS, Windows, Git

TECHNICAL EXPERIENCE

Research Associate Intern Jan 2023 — Present

Tsankov Lab, Mt. Sinai Medical School

• Analyzing spatial transcriptomic data for Hepatocellucar carcinoma(HCC).

• Develop pipelines to deconvolve and cluster cells with spatial and single cell RNA sequencing data.

Research Associate Intern

Tsankov Lab, Mt. Sinai Medical School

May 2022 — Aug 2022

New York, USA

New York, USA

GitHub: atharva-bhagwat LinkedIn: atharva-bhagwat

• Setup pipelines for detecting single nucleotide variants in single cell RNA-sequencing data.

- Developed a tool to detect somatic mutations in single cell RNA-sequencing data.
- Analyzing bulk and pseudo-bulk data for Lung Adenocarcinoma and Colorectal cancer to predict type of mutations using classifiers.

Machine Learning Engineer Oct 2020 — May 2021

ResoluteAl.in Bangalore, India

- Led development of an automation project to count yield and detect anomalies for a textile industry.
- Built pipeline to collect and auto-annotate data using YOLOv4.
- Developed pipeline using stacked machine learning models to feed inputs to the core logic.
- Designed and developed relational database using MySQL to generate reports.
- Worked closely with the stakeholders to build efficient application according to their requirements.

Machine Learning Engineer Intern

July 2020 — Sept 2020

ResoluteAl.in

Bangalore, India

- Developed proof of concepts for face recognition using CNN and minimum distance classifier, attendance management using YOLOv4 and area mapping.
- Developed efficient pipelines using Google Cloud Platform to display analysis generated by POCs on dashboards.
- Worked on developing parallel pipelines using Flask to perform computations at higher speeds.

Machine Learning Engineer Intern

July 2019 — Sept 2019

AI Technology and Systems

Milpitas, USA (Remote)

- Performed exploratory data analysis on 'Titanic' dataset and building various types of classification models to understand their working.
- Compared results based on metrics like: accuracy, f1 score, ROC curve, AUC, time taken to train.
- Compiled and presented the findings at AITS Summit 2019.

PROJECTS

Image Sorter June 2021 — June 2021

• Developed an application for easy sorting of images in different classes for dataset creation.

Unsupervised Video Summarization

June 2019 — May 2020

- Performed literature survey to understand previous approaches.
- Implemented algorithm to detect shot boundaries as part of research.
- Worked on a cycle-GAN architecture to develop unsupervised video summarizer for a dataset.

Visualization of CNNs and Effects of Adversarial Examples

December 2018 — May 2019

- Performed literature survey to understand interpretability of CNNs.
- Worked with MNIST dataset to understand outputs after every hidden layer.
- Literature survey on Fast Gradient Sign Method to generate adversarial examples from MNIST set.
- Compiled results and delivered a seminar as part of a course.

ACTIVITIES

Winner of Tandon Made Challenge 2021 Captain of PICT Table Tennis Team Member of PICT ACM Branch 2021

2017 - 2020

2016 - 2017