Aishwarya Harpale

aishwarya.harpale@rutgers.edu | +1 8484371276 | New Brunswick, New Jersey, USA

EDUCATION

RUTGERS UNIVERSITY
Master of Science, Computer Science
Aug 2021 - May 2023| NJ, USA
GPA: 4.0 / 4.0

SAVITRIBAI PHULE PUNE UNIVERSITY
Bachelor of Engineering, Computer Engineering
2016-2020 | Pune, India
CGPA: 9.04 / 10.0

LINKS

Website:// **aish-where-ya**
Github:// **aish-where-ya**
LinkedIn:// **aishwaryaharpale**

SKILLS

Languages
Java • Python • Javascript • PHP
Jquery • C • C++ • HTML
Databases
MySQL • MongoDB • Firebase
Machine Learning
Tensorflow • Keras • OpenCV • Tensorboard
Other Technologies
Docker • Flask • CUDA • Git
React • Redux • Laravel

COURSES

- Introduction to Data Structures and Algorithms
- Mathematical Foundations of Data Science
- Introduction to Artificial Intelligence
- Machine Learning
- Computer Vision
- Massive Data Mining

ADDITIONAL EXPERIENCE

- Teaching Assistant for CS439 : Introduction to Data Science

EXPERIENCE

CAKESOFT TECHNOLOGIES | Software Developer
Sept 2020 - July 2021
Developed Web Applications, designed various APIs and optimized performances of various microservices. Also wrote CI/CD pipelines for deployment of Web-Apps.

GOOGLE SUMMER OF CODE - LIBREHEALTH | Open Source Developer
May 2020 – Aug 2020

Worked on Low Powered Models for Disease Detection and Classification for Radiology Images. Experimented on models such as DenseNet, Inception, etc. using quantization and pruning techniques to improve model performance.

PERSISTENT SYSTEMS LTD. | Project Intern
June 2019 – May 2020

Research in the field of Explainable AI and Interpretable Machine Learning involving identification of biases in models trained on healthcare (Breast Cancer Prediction) and financial risk assessment (German Credit Risk Prediction) datasets.

PUNE INSTITUTE OF COMPUTER TECHNOLOGY | Research Intern
May 2019 - Dec 2019

Research conducted on Multimodal Summarization under the sub-category of Image-based summaries. Implemented feature selection in images using CNNs and an attention-based transformer architecture and generated embeddings of keywords for effective representations of the language.

PROJECTS

PATH PLANNING IN MAZES USING AI AGENTS
Designed and implemented various path planning agents using A-star, Repeated A-Star, Probabilistic Inference and Markov Decision Models.

COMMUNITY DETECTION IN GRAPHS
Built a library consisting of community detection algorithms such as Girvan Newman, Spectral Clustering and Louvain's method and performed visualization on Zachary's Karate Club and Planted L-Partition graphs.

CHEST-XRAY CLASSIFICATION AND LOCALIZATION
Developed a system for classification and localization of Chest-XRay images using DenseNet, Resnet and VGG. Built a website using Bootstrap and deployed it on a Flask server for the user to diagnose diseases.

PUBLICATIONS

[1] A. Abid, P. Sinha, A. Harpale, J. Gichoya, and S. Purkayastha. Optimizing medical image classification models for edge devices. *Distributed Computing and Artificial Intelligence, Volume 1: 18th International Conference*, 2021.

[2] U. Shah and A. Harpale. A review of deep learning models for computer vision. *2018 IEEE Punecon*, 2018.