# Aishwarya Harpale

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#### **EDUCATION**

#### **RUTGERS UNIVERSITY**

MASTER OF SCIENCE, COMPUTER SCIENCE

Aug 2021 - May 2023 NJ, USA

# 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 • C • C++ • Javascript

Python • HTML Databases

MySQL • MongoDB • Firebase

#### Machine Learning

Tensorflow • Keras • OpenCV • Tensorboard

#### Other Technologies

Docker • Flask • CUDA • Git

## **COURSES**

- Introduction to Data Structures and Algorithms
- Mathematical Foundations of Data Science
- Introduction to Artificial Intelligence

#### **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**

#### 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.

#### PLANT DISEASE DETECTION USING AN IOT DEVICE

Developed a custom model using CNNs to detect diseases in crops and deployed this model on a Raspberry Pi device for real-time predictions. Integrated this system with Cloud to generate reports on an Android app.

## **PUBLICATIONS**

- [1] A. Abid, P. Sinha, A. Harpale, J. Gichoya, and S. Purkayastha. Optimizing medical image classification models for edge devices. *Accepted at DCAI* 2021.
- [2] U. Shah and A. Harpale. A review of deep learning models for computer vision. 2018 IEEE Punecon, 2018.