

# Aishwarya Harpale

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## EDUCATION

### RUTGERS UNIVERSITY

MASTER OF SCIENCE, COMPUTER SCIENCE

August 2021 | New Jersey, USA

### SAVITRIBAI PHULE PUNE UNIVERSITY

BACHELOR OF ENGINEERING, COMPUTER ENGINEERING

August 2020 | Pune, India

CGPA: 9.04 / 10.0

## LINKS

Website: [aish-where-ya](http://aish-where-ya.com)

Github:// [aish-where-ya](https://github.com/aish-where-ya)

LinkedIn:// [aishwaryaharpale](https://www.linkedin.com/in/aishwaryaharpale)

## SKILLS

### Languages

Java • C • C++ • Javascript

Python • HTML

### Databases

MySQL • MongoDB • SQLite

### Machine Learning

Tensorflow • Keras • OpenCV •

Tensorboard

### Cloud Services

ThingSpeak • Firebase

### Other Technologies

Docker • Flask • CUDA • Git

## OTHER ACTIVITIES

**Workshop Head** - PICT ACM Student Chapter

**Teaching Assistant** - Google Developer Students' Club

**Teaching Assistant** - PICT ACM Student Chapter

**Technical Head** - PICT ACM Student Chapter(W)

**Class Representative** - Pune Institute of Computer Technology

**Member** - Association for Computing Machinery, Google Developer's Group - Pune and PyData - Pune.

## 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

### 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 regular reports on an Android app.

### 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. *Accepted at DCAI 2021*.
- [2] U. Shah and A. Harpale. A review of deep learning models for computer vision. *2018 IEEE Punecon*, 2018.