

Pratik Katte

Cell: +91 9819 394 543
pratikkatte7@gmail.com

WORK EXPERIENCE

Senior Research Engineer, Niramai Health Analytix, Bangalore, India

Jan 2020 – Present

- Was responsible for developing a machine learning based algorithms for a desktop application to help technicians efficiently capture breast thermal images for cancer screening.
- Played a lead role in development of an AI based desktop application that screens people to detect covid-19 symptoms such as fever and breathe rate and also compelling people to follow covid-19 protocol. The application screened 10L+ people across India.
- Awards: "On Spot Award" for the performance on Niramai Fever Test.

Data Science Intern, L.V. Prasad Eye Institute, Hyderabad, India

Jun 2018 – Aug 2018

- Design and Developed a conversational chatbot for doctor appointments and patient education. Deployed on a website serving approximately 500 visitors per day.
- Developed a data syncing service between the pupil-plus product and azure storage using python.

Data Science Intern, Prakshep, Bangalore, India

Jun 2017 – Jan 2018

- Developed a image processing based algorithm to periodically analyze the growth of a plant.
- Developed a Geographic Information System for working with maps and geographic information related to crop harvests.

Project Intern, Xerox Research Center India, Delhi, India

Jun 2016 – Jul 2016

- The objective of the project was to develop an educational platform for students in Uttar-Pradesh and Bihar.
- Developed textual, video lectures and designed the whole curriculum and course schedule for the subject "Programming with C++".

EDUCATION

University of Mumbai, Mumbai, India

Jun 2015

Bachelor in Engineering, Information Technology

Relevant Coursework: Intelligent System, Image Processing, Computer Graphics and Virtual Reality.

PUBLICATIONS

Pratik K., et al. "Automated Thermal Screening for COVID-19 using Machine Learning." *arXiv preprint arXiv:2203.14128* (2022).

Sabyasachi S., Pratik K., et. al. "Abstract PS2-44: Diagnosing COVID-19 From Images of Chest X-rays Communicated Via Whatsapp." UKIO Congress (2022).

Patil, Vivek, Pratik Katte, and Abhay Patil. "RESTORATION OF IMAGES USING ONLY NOISY DATA." *International Journal of Research and Analytical Reviews (IJRAR)* 6.1 (2019).

PROJECTS

Digital Exophthalmometer

Jun 2018 – Jul 2019

- The project intended to digitize the traditional instrument used by an optometrist for measuring the forward displacement of the eye. We designed a 3d printed working prototype that uses a NIR camera and developed an algorithm using k-means clustering to detect the iris and pixel per mm ratio to measure the protrusion of the eye.

Iris Based Attendance Management System

Dec 2016 – Feb 2017

- With a team of 5, we designed and developed an iris based attendance management system for Ministry of Rural Development, Gov.t of India. I was responsible for implementing Daugman Algorithm for iris recognition in python.

CONFERENCE TALKS

- "Niramai Fever Test: Automated Screening for COVID Symptoms" @Wolfram Technology Conference- 2021.
- "Machine learning for Covid-19 detection" @ Data Science Conference, Europe – 2021

TECHNICAL SKILLS

Programming Languages: Python, Nodejs, Reactjs, C++, C#.

Frameworks/Libraries: Tensorflow, Pytorch, GDAL, WPF, Django.