

Pranjal S Rajput

I am currently pursuing a Masters degree at Delft University of Technology, The Netherlands, with a focus on Deep Learning applications in Computer Vision.

Education

2018—present **Delft University of Technology**, *M.Sc.*, *Embedded Systems* (with Masters Annotation in Entrepreneurship).

Research Thesis: Supervisor <u>Prof. Dr. Jan van Gemert:</u> Finding the efficient ways to annotate a large-scale in the wild video dataset of marathon runners for research in Computer Vision

2011–2015 Maulana Azad National University of Technology, Bhopal, India, B.Tech., Electronics & Communication Engineering.

Major Project: Supervisor Prof. Dr. Jyoti Singhai: A security system is developed consisting of a finger print module, an alcohol detector module and a RFID module.

— Academic Projects

2019 Collection and Preparation of a Novel Dataset of Marathon Runners.

A novel video dataset of marathon runners captured using hand held smartphone cameras.

2019 cGANs for Cartoon to Real life images.

Conversion of cartoonized faces to a real face image using Conditional GANs.

2019 Localization and Activity Recognition App.

Three android based apps are developed for localization and activity recognition of a person in a floor of a building. The methods used are KNN, Bayesian filter and Particle filter.

2019 Stabilization of the Quadruple drone.

Stabilized a quadrotor aerial vehicle such that it can hover and fly with only limited user control. Also developed an andorid app to control the quadcopter using an android phone.

2019 Architectural Analysis & Contribution in FLAIR.

Analyzed the complete architecture of FLAIR, a state-of-the-art Natural Language Processing Python library.

Research Experience

Work Experience

2015-2018 Senior Software Engineer (Nucleus Software Exports Ltd, India).

- Algorithms Implemented: Decision Tree Algorithm, Batch Processing Module, Logistic Regression, K-Means clustering
- Technical Upgradation: From Struts 1.x and Java 6 to Struts 2 Framework and Java 8
- **Performance Upgrade:** Enhanced and improved the performance of various functionalities of the product like Multiple Linear Regression, Scorecard, Logistic Regression.
- Security Upgrade: Enhanced Application security by implementing features like X-frame Options, Cryptographic nonce and database layer.
- Product Compatibility: Made Lending Analytics application compatible for Chrome, Mozilla Firefox, and Internet Explorer 11.
- Database Script: Creation, Rollback and Cleanup for the entire application

Internships

2014 Summer Internship at IIT Indore.

Advised by Dr. Vivek Kanhangad: Face Recognition Using PCA

Teaching Experience

April 2020 - Graduate Teaching Assistant of Computer Vision.

present Main responsibilities: Guiding 2 student projects, grading of the seminar presentations, evaluate the questions submitted by the students.

April 2020 - Graduate Teaching Assistant of Cloud Computing.

July 2020 Main responsibilities: Graded the paper summaries submitted by students.

Feb 2020 - Graduate Teaching Assistant of Deep Learning.

April 2020 Main responsibilities: Guided 5 deep learning projects, helped students during the lab, evaluated the assignments.

Nov 2019 - Graduate Teaching Assistant of Distributed Algorithms.

Feb 2020 Main responsibilities: Helped students during the lab, evaluated the lab assignments and paper summaries that were part of the exam.

Summer Schools

July 2020 Eastern European Machine Learning Summer School, Krakow Poland.

The program is focused on latest trends in Deep Learning. Attending guest lectures, theoretical lectures & practical sessions related to Deep learning.

Nov 2019 ATHENS Network: Advanced Technology Higher Education Network, Czech Technical University in Prague, Grade: A.

Learned various concepts of Game Theory

Extra Curricular Activities

2011-2015 **Vision**, *MANIT*, India.

Was an active member of Vision, a technical student club. Was Technical Head in 2014 -15.

2012 Workshops, MANIT, India.

Conducted various workshops on White Line Tracer Robots, Microcontrollers, & MATLAB for freshmen.

2013 Roboelevar, MANIT, India.

Event Coordinator of national level Robotics competition "ROBOELEVAR" in TECHNOSEARCH 2013, at MANIT.

Skills

Programming Skills: Python, Java

 $\textbf{Python Libraries}: \ \text{Numpy, Scipy, Matplotlib, pandas, scikit-learn, Selenium Webdriver, Beautiful}$

soup

Deep Learning Frameworks: PyTorch

Database: Oracle, MySQL

Web-Related Knowledge: JSP, JQuery, JavaScript, Struts, Spring, HTML, CSS, Servlets

Others: Eclipse, Jenkins, Jasper, SonarQube, JIRA, PyCharm, Android studio, Bash

Honors and Awards

2019 TRAVEL GRANT, ATHENS Network: Advanced Technology Higher Education Network

2018 **Pride Of Performance** Award by the Senior Management of Lending Analytics

2017 L.I.V.E Small Team Award for the team Lending Analytics of year 2017

2012 Second Runner-up, Grid Solver Robot category in Technosearch, MANIT

Languages

English Business Fluent

Hindi Mother Tongue or Bilingual Proficiency

Interests

Cricket, Music, Movies