Pankaj Pundir

Department of Computer Science & Engineering, National Institute of Technology, Uttarakhand 246174.

Area of Interest

Computer Vision, Deep Learning, Artificial intelligence, Data Science, Data Structures and Algorithms

Educational Qualification

National Institute of Technology (NIT), Uttarakhand, India Bachelor of Technology, Computer Science & Engineering (5th Sem.) 03/2019-present 8.83 CGPA

Network Security Data Structures & Programming

Algorithms Operating Systems

Data Science Computer Vision and Image processing

Artificial intelligence Neuro Fuzzy technique

Central Board of Secondary Education, New Delhi

04/2014-03/2015

Vivekanada School, Jogiwala, Dehradun Senior Secondary School, **91.6%**

Central Board of Secondary Education, New Delhi

04/2012-03/2013

Vivekanada School, Jogiwala, Dehradun Secondary School, **10 CGPA**

Technical Skills

LanguagesC++, PythonDatabase SystemsMySQL

Environmental Packages pandas, seaborn, Matplotlib, Kivy **Web Development** JavaScript, jQuery, CSS, HTML, PHP

Computer VisionOpenCVDeep LearningPyTorch, Keras

Current Project - Ongoing

Currency Classification and Description
 Technologies: Deep Learning, OpenCV, Python

Synopsis: The project is designed for automation in currency detection and finding its denomination value. Very useful in currency exchange center and for Visually impaired people. Helps in keeping track of the exchange of different currencies.

Hand Gesture Detection and System Control

Technologies: Python, OpenCV

* This project is designed for identifying hand gestures to control computer. This will eliminate the need of mouse as well as keyboard, efficiently usage of computer resources by applying multi user for single system.

Synchronous Traffic Control

Technologies: Python, OpenCV, Reinforcement Learning

Synopsis: The designed system schedules the traffic in an efficient manner with known future inputs. This method is very much promising for heavy traffic countries and give more security as advance features like **accident detection** is implemented. Routing traffic and providing **Green Corridor** in emergency condition.

Projects

License number extraction using OpenCV

Technologies: Python, OpenCV

Synopsis: The project is designed for extraction of license plate number in real time. It tackles various challenges like rotated plate, real time traffic. It uses OpenCV and Tesseract – OCR to implement text extraction method.

Instant Attendance

Technologies: PHP, CSS, JavaScript

Synopsis: The project is designed for reducing the time taken during attendance in college/school. Online platform is created to mark attendance with two available options.

- Normal mode: Teacher will speak the roll number and mark attendance on the go.
- Instant mode: Teacher will create a code which allow students to mark attendance in real time as code is shared with students via private medium.

This reduces the attendance time to 20 seconds or less. Can be implemented within local network and online.

❖ Fig Sense: Fully automated Graph Reader

Technologies: *Python, OpenCV*

Synopsis: This project is designed for extraction of information from chart images. Currently the software is made to classify and extract bar and line images. The software tackles the problem under the field of document analysis and data extraction.

Work Experience

• Summer Intern, IIT Ropar. Rupnagar, Punjab

- o **Duration**: May. 2018 Jul. 2018 (2 Months)
- The internship deals with product development using Computer Vision and Machine Learning. Derived a method for Data Extraction and classification of line and bar charts. The Accuracy of model and technique derived was promising.

Extracurricular

| • | Technical Coordinator (CSE) | 2017-2018 |
|---|---|-----------|
| • | Coordinator (CSE) Cliffesto | 2018 |
| • | Event Head (PRODYOGEEKY TECH MEET 2017 NITUK) | 2017 |
| • | Coordinator Kodesk Club NITUK | 2017-2018 |
| • | Joint Secretary of Kodesk Club NITUK | 2018-2019 |
| • | Codathon Ambassador (online coding competition MNIT Bhopal) | 2018 |

Personal Information

D.O.B 20/01/1998
Marital Status Single
Language Known English, Hindi

Candidate: Pankaj Pundir

Date: 10/03/2019

^{*}References would be provided on request.