Pankaj Pundir

Department of Computer Science & Engineering,
National Institute of Technology, Uttarakhand 246174.
Cell: +91-7895289895   E-mail: pankaj369.cse16@nituk.ac.in

Area of Interest

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

Educational Qualification

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

Languages	C++, Python
Database Systems	MySQL
Environmental Packages	pandas, seaborn, Matplotlib, Kivy
Web Development	JavaScript, jQuery, CSS, HTML, PHP
Computer Vision	OpenCV
Deep Learning	PyTorch, 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

   Synopsis: 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 chat images. Currently the software is made to classify and extract bar and line images. The software readout the content using basic text summarization. Thus, useful for blind people for graphical data interpretation.

Work Experience

▪ **Summer Intern, IIT Ropar**. Rupnagar, Punjab
   o **Duration** : May. 2018 – Jul. 2018 (2 Months)
   o 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

Date: 10/03/2019   **Candidate: Pankaj Pundir**

#References would be provided on request.