# Puneet Walia

%: puneet.web

: github.com/puneet-walia

@: puneetwb18@gmail.com

**\:** +91-9689367252

in : linkedin.com/in/puneet-walia

#### **EDUCATION**

# Guru Nanak Dev Engineering College, Ludhiana, India

Sep 2021 - Present CGPA - 9.22/10

B.Tech. in **Information Technology** 

**Coursework:** Operating Systems, Data Structures and Algorithms, Artificial Intelligence, Machine Learning, Networking, Databases, Cyber Security, Information Security, Internet of Things, Web Programming

#### **SKILLS**

**Languages** C/C++, Java, Python, JavaScript, SQL

**Frameworks** Tensorflow,Pytorch,React.js, Hadoop, NLTK,Scapy,FastAPI, Scikit **Tools** Git, GitHub, MongoDB, MySQL, Anaconda, Postman,Tableau

Platforms Linux, Web, Windows, Arduino

**Soft Skills** Leadership, Event Management, Public Speaking, Time Management, Teamwork, Problem

Solving

#### **EXPERIENCE**

## Trinity College Dublin, UOD

Aug 2023 - Dec 2023

Research Intern under Dr. Ashish Kumar Jha

Remote

- Implemented a NLTK based model to detect HR's perspective on Artificial Intelligence
- Designed a Selenium model with Chrome Driver to preprocess and extract the LinkedIN posts and arrange them in spectrogram for sentiment analysis, achieving 35% acceptance among subject

## Guru Nanak Dev Engineering College,PTU

Mar 2023 - June 2023

Research Intern under Dr. Sandeep Kumar Singla

Ludhiana

- Worked in HPC on a government-aided project called 'Medigen', an pharmaceutical app to detect insights about medical drugs.
- Developed a template for prompt generation using Chain-of thought prompting technique for a LLM, prior to tokenization and stemming.
- Designed a TensorFlow model for GAIT data to process signals and utilized spectrogram for feature extraction, achieving 13% accuracy improvement in a Tensorflow federated learning environment using data from 2000 clients in the Parkinson Detection project.

#### **Creation Media**

June 2022 - Sept 2022

New Delhi

Intern

- Developed a website for a Machine Learning forecasting model using MERN Stack for a UK-based client.
- Created APIs for the forecasting model using Fast API and integrated it into UI.

#### **PUBLICATIONS**

- Sandeep Kumar, **Puneet Walia**, Rajat Garg. Parkinson Detection using GAIT analysis and signal processing (2022, Sept) ICAET
- Rupinder Kaur, Sandeep Kumar, Puneet Walia. Predictive Analysis of Ludhiana's AQI(2023, November, 2023) – ICAET

### **PROJECTS**

# CancerClassifier Pytorch, Image Classification, Streamlit O

A web application for classifying skin cancer types using a pre-trained ResNet-50 model. The project includes data preprocessing, model training and a Streamlit web application for predicting types of SkinCancer from uploaded images.

# **GNDECScan** React.js, Express.js, MongoDB, FastAPI, Image Classification

A web app that was designed for my college where they could scan and upload answer sheets of students. This app uses OCR technology to detect text from handwriting(specially Punjabi) and then uploads it to an admin page where it is maintained in a database.

# Netflix's Story Tableau, PostgreSQL, Data Analysis

Developed a data story after preprocessing data of Netflix's shows and movies and analyzed the genre and rating of shows using suitable plots along with presenting them in a very interactive form.

#### VOLUNTEER EXPERIENCE

## **CRY-Child Rights and You**

June 2020 – Present

Youth Intern

- Managing donor data and overseeing leads for children experiencing abuse.
- Instructing a class of 45 underprivileged children in fundamental Computer Science concepts.
- Initiated various offline and online crowdfunding programs which raised over 20000 USD

## **Center for MultiFaceted Learning, GNDEC**

Moderator

Feb 2021 – Present

- Heading a team of 90 executive members.
- Acting aş a bridge between core and sub-core members and representing 230 members of CML

#### HONORS AND AWARDS

- Selected in Illuminate AI as a **mentee** out of **10000 applications** June,2023
- Selected as a **delegate** in **AIS Youth Conference 2023 in Bali**, Indonesia- September, 2023
- Selected as an intern under Wiz Research Lab, Romania, for October 24
- Got into the **pre-final round** of **Samsung's solve for tomorrow.** June 2022
- Won the **Inter-college Basketball championship 2023**, as a vice-captain.