MANU GUPTA

ACADEMIC PROFILE

Degree/Certificate	Institution	Percentage/CGPA	Year
B-Tech	Electrical Engineering IIT (BHU), Varanasi	9.70	2022

Sem I	Sem II	Sem III	Sem IV	Sem V	Sem VI	Sem VII	Sem VIII
9.48	9.81	9.45	10.00	10.00	9.56	-	-

CBSE (XII)	MOUNT LITERA ZEE SCHOOL ,JHANSI	96.00	2018
ICSE (X)	St. FRANCIS' CONVENT INTER COLLEGE,JHANSI	96.20	2016

SKILLS

- **Programming Languages:** C,C++,Python ,JavaScript
- **Web Development:** HTML, CSS, Bootstrap, ReactJs
- **Areas of Interest:**Data Structures and Algorithms, Competitive Programming, Object-Oriented Programming, Machine Learning, Deep Learning
- **Soft Skills:** Problem Solving, Hard Work, Team Work

PROJECTS

SHORTEST PATH VISUALIZER (WEB APP)
June 2020- July 2020

MICROSOFT ENGAGE 2020

Created a web application (shortest path visualizer) using React App, which is used to visualize the shortest path between two points while avoiding obstacles on the way. Shortest Pathfinding algorithms like BFS, Bidirectional BFS, Dijkstra, A*, and Best First Search are used . The app was deployed using Heroku platform.

MUSIC GENRE CLASSIFIER
May 2020- July 2020

Under Professor Dr. Vinayak Shrivastava (Assistant Professor Department of Computer Science and Engineering)

Created an automated system for classifying musical files on the basis of their genres. The deep learning approach is used wherein a CNN model is trained end-to-end, to predict the genre label of an audio signal, solely using its spectrogram. The GTZAN dataset (audio tracks with 10 music genres) is used.

HANDWRITTEN CAPTCHA SOLVER
March 2020-April 2020

MOSAIC 2020

Developed a captcha solver using computer vision, convolutional neural network, python frameworks, and libraries like Keras, TensorFlow, etc .and trained the Deep CNN models to find the letters and digits in the CAPTCHA image.

Exploratory Project: BALL AND PLATE CONTROL
January 2020- May 2020

Under Professor Dr. Shyam Kamal (Assistant Professor Department of Electrical Engineering)

This project explores a real-time application of Ball and Beam controlled by a PID controller on LabVIEW setup. The basic idea is to use the torque generated from the system to control the position of the ball on the plate. A mathematical model was created for the system followed by model linearisation, system identification, controller design, and real-time 2-D PID control of ball position.

COMPUTER VISION PROJECT
February 2019-March 2019

PIXELATE - TECHNEX 2019

Developed an autonomous robot that captures real-time images using cameras and processes them to detect and traverse the shortest path. It employed image processing algorithms using Python Scripting on the OpenCV platform.

CERTIFIED COURSES

- **Data Structures and Algorithms** course in C++ on UDEMY
- **Competitive Programming** course on Coding Ninja
- **Algorithmic Toolbox** course on Coursera By University of California San Diego
- **Machine Learning** course on Coursera By Stanford University, Instructor - Andrew NG
- **Python** training on Internshala
- **Coding Interview Questions** course on Algoexpert

POSITION OF RESPONSIBILITY

Hospitality Executive, for the annual sports fest of IIT BHU, SPARDHA 2019

HONOURS AND ACHIEVEMENTS

- Secured **2nd Position** in Jhansi **District** in class 12th CBSE 2018
- Selected for MICROSOFT CODESS MENTORSHIP PROGRAM (ENGAGE 2020)
- Qualified for Round 1A in Google CodeJam 2020

EXTRA-CURRICULAR ACTIVITIES

Microsoft Blockchain in Azure Worskshop January 2020

Participated in Microsoft Blockchain in Azure worshshop by MICROSOFT STUDENT PARTNERS 2020

SIMULIM April 2019

PRASTUTI 2019

Participated in the simulation event which required simulation of Electrical power system using MATLAB platform.

CONSILIUM April 2019

PRASTUTI 2019

Participated in the Electronic Computing event which required designing electronic circuits so as to employ minimum hardware using logic gates, combinational circuits, sequential circuits, etc.

RC PLANE EVENT December 2018

BOEING IIT National Aeromodelling Competition- , TECHFEST (IIT BOMBAY)

Designed a remote-controlled plane to take off and climb at an optimum angle to gain high lift and reach maximum height and land by gliding.

T: 7023395937 **E:** manugupta425@gmail.com **Address:** 179,Outside Khanderao Gate,Jhansi