ATULYA DEEP, RA2011047010024
Course : **B.Tech**, Artificial Intelligence, 2024
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SRM INSTITUTE OF SCIENCE & TECHNOLOGY
(Deemed to be University u/s 3 of UGC Act, 1956)

ACADEMIC DETAILS

COURSE	INSTITUTE/COLLEGE	BOARD/UNIVERSITY	SCORE	YEAR
CLASS X	PODAR INTERNATIONAL	CBSE	9.2 CGPA	2016
CLASS XII in SCIENCE	DAV	CBSE	85.2 %	2019
B.Tech	SRM Institute of Science and Technology - Kattankulathur Campus		9.41 CGPA	2024

Subjects / Electives	Reinforcement learning , Neural Networks, Deep learning , Machine learning, Database management system, Analysis and design of Algorithm, Web development
Technical Proficiency	C Programming, OpenCV, Keras, HTML + CSS, Tensorflow, Analysis and Design of Algorithms, Neural Networks, Machine Learning, CNN, Python3, Data Structures

SUMMER INTERNSHIP / WORK EXPERIENCE

Research Intern, Indian Institute Of Technology Patna **Oct 2022 - Jan 2023**
I researched and implemented various Neural Network model with contrastive learning and performed comparative study between the latest techniques and custom model. I also co-authored a research paper 'Tabular Entity Relationship Establishment using CLF-RCNN with TERED" for IJCNN Conference 2023 held at Gold Coast, Australia.

Intern, SHPC TECHNOLOGIES PRIVATE LIMITED **Jun 2021 - Aug 2021**
Worked as intern on Web Dev part of the company as a full stack developer
-SQLdatabase
-HTML/CSS
-JavaScript
-NodeJS

PROJECTS

Personal Portfolio - Web Development **May 2023 - Jun 2023**
It is built with HTML,JavaScript and CSS, and it features a clean and responsive design. The website showcases my projects, experiences, and skills, making it easy for visitors to learn more about my work. I hope you enjoy checking out my portfolio! Site

Hardware Implementation Reinforcement Learning - Reinforcement Learning **Mar 2023 - May 2023**
Utilized reinforcement learning (RL) algorithms to develop hardware implementations of various projects, including a navigation robot, and tic-tac-toe-playing Cobot using Ned Niryo (Robotic Arm)

Traffic sign recognition system - Computer Vision **Sep 2022 - Nov 2022**
Developed a Traffic Sign Recognition System using Machine Learning techniques to recognize and classify road signs for road safety. The system detects and compensates for driver inattention or possible misinterpretation of road signs using visual traits such as shape, color, and pictogram. The project aimed to make driving safer and easier by enabling vehicles to understand road signs even in harsh environments, and to assist people with visual impairments or color blindness.Repository

Neuro-Genetic-disorder-prediction - Machine Learning **Sep 2022 - Nov 2022**
Alzheimer's and Parkinson's disease are the most common forms of dementia that degenerate neurons in the brain cells. This paper targets a comparative study on the performance of machine learning classifier and Neural Network techniques in neuro-degenerative data. The Neural Network algorithms gives classification accuracy ~92% with One hot Encoding Method. Repository

Coastrack - DRDO **Jun 2022 - Present**
- Coastal security and surveillance
- The project is incubated under SIIEC (SRM Innovation Incubation and. Entrepreneurship Centre)

Smart Attendance System (FACIAL RECOGNITION) - Computer Vision **May 2022 - Jun 2022**
A face recognition attendance system automatically identifies and confirms a person and records attendance based on their face detection. Compared to existing system traditional attendance marking system, this system reduces the workload of people. This proposed system is implemented with 4 phases such as Image Capturing, Segmentation of group image and Face Detection, Face comparison and Recognition, Updating of Attendance in database. Repository

Furniture Detection - Computer Vision **Apr 2022 - Jun 2022**
Computer vision is a rapidly growing field in the technology and computer science world. An object detection system consists of recognizing, classifying, and localizing, not only one piece of furniture in an image but every referenced piece of the furniture mentioned. One of the most popular algorithms to date for real-time object detection is YOLO (You Only Look Once). The great thing about this Deep Neural Network is that it is very easy to retrain the network on your own custom dataset. In this project, we have made a custom dataset consisting of 6 classes of furniture . Respository

CERTIFICATIONS

CERTIFICATION	CERTIFYING AUTHORITY	DESCRIPTION
SQL for Data Science	Coursera	
Natural Language Processing in TensorFlow	Coursera	
Data Science Methodology	IBM	
AWS Academy Cloud Foundations	AWS	
AWS Academy Machine Learning	AWS	
Database management system	NPTEL	
Introduction to TensorFlow for Artificial Intelligence, Machine Learning, and Deep Learning	Coursera	
Convolutional Neural Networks in TensorFlow	Coursera	

POSITION OF RESPONSIBILITY

Domain Lead - AI ROBO LAB **Mar 2023 - Present**
A lab setup for integration of hardware and software to built custom robots and products

Leader - Coastrack **Jun 2022 - Present**
Team lead for a SIIEC funded project about costal surveillance

AWARDS AND RECOGNITIONS

COMPETITIONS

KAVACH 2023 Cyber security Hackathon **Apr, 2023**
Designed and developed a technological solution based on live CCTV feeds, that can automatically detect incidents related to street crime, violence, burglary, theft, infiltration, unauthorized access etc. and generate alerts to the nearest Police Station. The solution should also be able to generate a report and maintain a database that includes the nature of incident/crime, location, time, level of alert (i.e., low, medium, high risk alert) etc.

CINTEL's Next Gen AI Ideathon **Oct, 2022**
Designed an effective and cost efficient AGV (autonomous guided vehicle) for warehouses with cloud based integration and hardware upgrades for smoother and faster motion

IDEX DRDO HACKATHON **Jul, 2022**
DRDO HACKATHON GOT SELECTED AND FUNDED BY SIIEC(SRM Innovation Incubation and. Entrepreneurship Centre)

CONFERENCES AND WORKSHOPS

IJCNN 2023
Organized by: **IEEE** | Date: **Jun 2023**
IJCNN is the premier international conference in the area of neural networks theory, analysis and applications held Gold Coast Convention and Exhibition Centre Queensland, Australia. Here I presented my research paper "Find the Table : A Contrastive Learning-based Approach with Faster RCNN for Establishing Tabular Entity Relationships"

Jetson Nano Workshop
Organized by: **Dep of CINTEL** | Date: **Jul 2022**
Jetson Nano kit - Handson workshop
- Worked with Yolo V5 library for object detection
- Furniture detection model
- And Deployment of the model

EXTRA CURRICULAR ACTIVITIES

Cooking
Badminton
Represented Nagpur at U-17 Maharashtra state championship

PERSONAL DETAILS

Date of birth: 06 December 2001	Father's name: Girish Chandra Prasad
Permanent address: D3 lakhan residency RPS, patna, patna, Bihar, PIN - 801503	Languages known: Hindi, English
Permanent contact number: 9816622382	Nationality: INDIAN

Passport availability: Yes