Nishi Poddar

+1-214-940-5393 | nishispoddar@gmail.com | github.com/poddarnishi/ | linkedin.com/in/nishipoddar/

EDUCATION

MS in Computer Science   Expected Graduation - Dec 2024
University of Massachusetts Amherst   *Massachusetts, USA*

Bachelor of Technology in Computer Engineering (Honors)   Jul 2019 – May 2023
NMIMS University | GPA 3.88/4.0 (Meritorious List)   *Mumbai, India*
Minor: Machine Learning and Data Analytics

PUBLICATIONS

A Review on Autonomous Vehicles: Progress, Methods and Challenges   *Link*
- Researched ML algorithms like **CNN, YOLO, LiDAR** for real-time environmental perception in driving scenarios.
- Analysed **Q-learning** and **Hidden Markov** AI models to predict driver intent and navigate complex driving situations.
- This paper was published in July 2022 in the Electronics Journal, MDPI receiving **120+ citations**.

EXPERIENCE

Software Development Intern   May – Jun 2022
Metta Social Solutions Pvt. Ltd. — Pune, India
- Created an optimal data pipeline using **Python** and **SQL** for over **20,000** NGOs to generate actionable insights.
- Utilized **UIPath** and **MySQL** for automated data scraping and API calls, boosting the data collection efficiency.
- Designed a sophisticated process to perform **feature extraction** for due diligence of NGOs and CSR projects using **sentiment analysis** to analyze news articles and **random forest** like models to predict fraud detection.

Team Leader   Aug 2019 - Jun 2021
Project Vishuddh, Enactus — Mumbai, India
- Drove social impact by empowering **30+ women** in establishing a **sustainable** detergent and sanitation business.
- Implemented strategic supply chain optimizations, resulting in a substantial **40%** reduction in production costs.
- Led **Research and Development** initiatives, fostering innovation and ideation to uplift rural artisans and strategically identify untapped markets for their products.

PROJECTS

Code Summarization   Mar 2023
- Created an **NLP** tool using LLMs **CodeBERT** and **RoBERTa** for automatic real-time English summaries of code files.
- Enhanced project collaboration by optimizing **transformer** based algorithms, achieving an **accuracy** of **0.83** through cross-validation.

Hairstyle Recommendation System   Nov 2021
- Developed a Flask-based face detection app using **MLP** classifier achieving 0.74 accuracy over **KNN** and **LDA** models.
- Implemented hairstyle **recommendation system** based on trends and preferences using **OpenCV** enhancing UX.

Movie Ticket Booking System   Mar 2021
- Developed a **Django**-based ticket booking portal, enhancing data validation and management through **MySQL**.
- Implemented a movie recommendation system using **SVM** with a linear kernel, using purchase history to increase user engagement and satisfaction.

TECHNICAL SKILLS

- **Skills**: C, C++, Java, Python, C#, SAS, SQL, Pytorch, Git, MATLAB, R, Scala, NLTK, spaCy
- **Coursework**: Data Structures, Design and Analysis of Algorithms, Relational databases, Artificial Intelligence (AI), Machine Learning, NLP, Neural Networks, Data Visualization, Unix programming, Operating Systems, Cybersecurity
- **Certifications**: Data Science and visualization specialization (IBM), Machine Learning (University of Washington)

ACHIEVEMENTS

- Awarded Mitacs GRI Summer Research Intern grant from Dalhousie University, Canada in 2022 to assist in research on the effects of the pandemic on software professionals
- Secured Runners-up in National-level Coding competition, ALGORYTHM in 2021
- Finalist in National-level Business planning competition conducted by IIM Indore for the strategic presentation of social entrepreneurship venture, Project Vishuddh, in 2020