Rishabh Patil

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EDUCATION

- **New York University** *Sep 2024 - May 2026*
  MS in Data Science — CGPA: 3.55/4 New York, USA
  Coursework: Natural Language Understanding , Machine Learning, Computational Linear Algebra

- **University of Mumbai** *Dec 2020 - May 2024*
  B.Tech in Data Science with Honors in Computational Finance — CGPA: 9.53/10 (3.96/4) Mumbai, India
  Relavant Coursework: Big Data, Computer Vision, Reinforcement Learning, Cloud Computing

SKILLS

- **Languages and Tools:** Python, R, SQL, MS Excel, Git, Github, Jupyter Notebook, Spyder, Pycharm

- **Statistical Analysis:** A | B testing, Causal Inference, Data Validation, and Hypothesis Testing.

- **Machine Learning:** Tensorflow, Keras, OpenCV, Pandas, Numpy, Pytorch, YOLO, NLP, LangChain

- **Web Technology and Visualization:** Streamlit, Flask, React, Django, PowerBI, Tableau, Looker

- **Databases and Cloud Platform:** MySQL, PostgreSQL, SQLite, MongoDB, AWS

- **Big Data and Devops:** Hadoop, Apache Spark, Kafka, CUDA, BigQuery, Cassandra, Kubernetes, Snowflake,Jenkins, Docker, Splunk.

PROFESSIONAL EXPERIENCE

- **Solar Secure Solution** *Feb 2023 - April 2023*
  Junior Machine Learning Engineer (Intern) Bangalore, India
  ◦ Designed an innovative script integrating **Computer Vision, NLP, and Azure OCR,** which facilitated the extraction of critical data points from diverse sources; **reducing processing time by 25%**.
  ◦ Created an innovative machine learning capstone program featuring immersive labs and tailored resources for **100 employees**, fostering a culture of continuous learning.
  ◦ Achieved a **20% increase in skill assessment score**s and an **85% project completion rate** through the initiative, establishing a culture of ongoing professional development.

- **Acmegrade Pvt Ltd** *July 2022 - Sept 2022*
  Artificial Intelligence and Machine Learning Trainee & Intern Bangalore, India
  ◦ **Contributed to a collaborative project** on an advanced recommendation system, resulting in a **15% profit increase for over 50 small businesses** through personalized recommendations.
  ◦ **Identified problem areas and conducted technical research**, leading to the **development of 3 innovative products** that improved customer retention by **25%**.

PROJECTS

- **Personalized Recipe Recommendation System Using LLM** *July 2023 - May 2024*
  Retrieval Augmented Generation , OpenAI GPT-3.5, OpenAI text-ada-002 Embedding Model , Langchain [O]
  ◦ Engineered a visually appealing interface dedicated to collecting essential user preferences, leading to a significant **35% rise** in engagement.
  ◦ **Utilized the OpenAI text-ada-002 embedding model** to create dense vector embeddings and develop a search algorithm, improving recipe match accuracy by **40%** and reducing irrelevant suggestions by **25%** .
  ◦ **Integrated OpenAI GPT-3.5** to enhance recipe recommendations, achieving a **50% increase in user satisfaction** based on feedback.

- **Driver Drowsiness Detection System Using YOLO V5** *Jan 2022 - Jan 2024*
  YoloV5, Streamlit, CNN, Espeak Module, DL [O]
  ◦ **Developed two YOLOv5 models** for driver drowsiness detection—Eye Position and Yawning Models—achieving **85% accuracy** and improving alertness response time by **30%** with real-time probability scores and an audible alarm.
  ◦ **Engineered an AI-driven system** combining CNN outputs, reducing false positives by **20%** and enhancing accuracy by **15%** while processing over **1 million data points**.

PUBLICATIONS

[C.1] Patil, R., Jha, S., Vartak, P. (2024). Driver Drowsiness Detection System Using YoloV5. In: Sharma, N., Goje, A.C., Chakrabarti, A., Bruckstein, A.M. (eds) Data Management, Analytics and Innovation. ICDMAI 2024. Lecture Notes in Networks and Systems, vol 998. Springer, Singapore. [🌐]

AWARDS

- **THIRD prize in AI and Deep Learning track- Driver Drowsiness Detection System Using YOLO V5** *Jan 2024*
  International Conference on Data Management and Analytics and Innovation. ICDMAI 2024 [O]