$\frac{Harsh\ Parikh}{\text{Munich,Bavaria,Germany}\ |\ go36bin@mytum.de}\ |\ LinkedIn\ |\ GitHub\ |\ Blog\ Posts\ Portfolio}$

Education

Technical University of Munich, Munich, Germany

2024 - 2026

M.Sc. Artificial Intelligence in Society,

Nirma University, Ahmedabad, India

2019 - 2023

B.Tech in Instrumentation and Control with minors in Computer Engineering, 2023

Work Experience

Max Planck Institute for Software Systems Software Developer

Jan 2023 - Present Saarbrücken, Germany

- Boosted model training time by 40% by developing a high-performance data-serving infrastructure for machine learning models.
- Achieved a 95% accuracy rate by designing and executing a proof-of-concept ML system prototype based on satellite images to detect land cover patterns.
- Enhanced cross-application consistency by engineering a comprehensive UI component library with Storybook, React, TypeScript, and Tailwind CSS, streamlining development processes.

Cling Systems Data Analyst

Apr 2023 - Sep 2023 Stockholm, Sweden

- Improved prediction accuracy by 30% by building a model to determine the resale value of second-hand batteries.
- Streamlined production costs by 15% by integrating data analysis findings into product design processes through cross-functional team collaboration.
- Conducted a comprehensive analysis of 8 battery specifications, including cell voltage, cell chemistry, and battery density.

Canadian Centre for Climate Change and Adaptation Research Intern

Jun 2022 - Nov 2022 Charlottetown, Canada

- Increased forecasting accuracy by 30% by fine-tuning Fbprophet and Gluon-ts forecasting algorithms for predicting groundwater levels.
- Enhanced data-cleaning efficiency by 45% by resolving data-cleaning scripts for sensor data.
- Instilled a robust data-driven approach to climate policy by partnering with the Govt. of Prince Edward Island on 2 field projects.

Indian Institute of Management Data Analyst

Jan 2022 - May 2022 Ahmedabad, Ğujarat

- Reduced data collection time by 40% by building an automated Python script for scraping CSR information from the Marketline database.
- Extracted CSR information for over 20 corporate companies daily by incorporating an efficient web scraping strategy using Beautifulsoup and NLTK libraries.

Project Experience

Swarm Robot Path Optimization Research Project

Jan 2021 - Jun 2021 Ahmedabad, Gujarat

- Designed the three most efficient algorithms for swarm robots to traverse between points.
- Received funding of 100,000 INR (1200 USD) from the Gujarat Council on Science and Technology (GUJCOST) for further research.
- Conducted over 500 simulations, testing the algorithms scalability and robustness across various environments.

- Identified market trends, strengths, and weaknesses to inform strategic decision-making and improve market positioning through in-depth analysis of 4 companies.
- Designed personalized onboarding experiences for 3 distinct user personas, using success metrics and A/B tests to improve user onboarding.
- Established a product-led growth strategy, recommending 2 areas for future growth to drive user acquisition and retention.

Leadership Experience

Canadian Society for Bioengineering Volunteer

Jul 2022 - Jul 2022 Charlottetown, Canada

- Coordinated logistics for the annual conference of the Canadian Society for Bioengineering, ensuring smooth operations and helping 50+ presenters find their designated rooms on time.
- Managed data entry tasks with a high degree of accuracy, entering over 150 attendees information into the system while adhering to strict confidentiality protocols.
- Supported the theme "Agricultural Sustainability and Food Security through Precision Agriculture Technologies" by researching relevant industry trends and providing valuable insights to attendees during networking breaks.

Nirma Community Service Volunteer

Dec 2019 - Dec 2022 Ahmedabad, Gujarat

- Provided educational resources and support to 50 specially-abled children, ensuring continued learning during the lockdown period.
- Initiated and organized the "Act of Kindness" campaign, ensuring weekly trips to local slums to distribute food packages to children in need.

Publications

Parikh, H., Panchal, N., Sharma, A. (2023). Cryptocurrency Price Prediction Using Machine Learning. Proceedings of the 6th International Conference on Advance Computing and Intelligent Engineering. Lecture Notes in Networks and Systems, vol 428. Springer, Singapore. (**Published**).

Parikh, H., Padariya, K. V., Sharma, A. (2023). Price Prediction for Pharmaceutical Stocks During Covid-19 Pandemic. Proceedings of the International Conference on Applications of Machine Intelligence and Data Analytics (ICAMIDA 2022), 61-68. Atlantis Press. (**Published**).

Parikh, H., Saijwal, I., Panchal, N., Sharma, A. (2022). Autonomous Mobile Robot for Inventory Management in Retail Industry. Futuristic Trends in Networks and Computing Technologies. Lecture Notes in Electrical Engineering, vol 936. Springer, Singapore. (**Published**).

Parikh, H., Panchal, N., Patel, V., Sharma, A. K. (2024). American sign language classification using deep learning. International Journal of Biometrics, 16(6), 640-659. (Published).

Parikh, H., Afzal, H., Farooque, A. (2023). Hyperparameter tuning artificial intelligence models for groundwater level prediction, Water MDPI. (Submitted).

Parikh, H., Trivedi, M., Bindschaedler, L. (2023). Harnessing Data Augmentation for Disaster Detection. (In preparation).

Awards

- Ranked in the top 1 percentile in High-school state examination, granted a **Tuition Fee Waiver** scholarship for undergraduate studies.
- MITACS Globalink Research Internship award, with an acceptance rate of 7%.
- Secured the best undergraduate thesis award, ranking in the top 5 out of 80 students.
- Impact Fellowship from the Global Governance Initiative, with an acceptance rate of 5%.