

Anirudh K. Kotamarthy

CONTACT INFORMATION	7950 Preston Rd Plano, TX 75024, USA	<i>Mobile:</i> (217) 974-9705 <i>Email:</i> anirudhkotamarthy@gmail.com
RESEARCH INTERESTS	Market Design, Game Theory, Econometrics, Operations Research for public policy	
EDUCATION	University of Illinois at Urbana-Champaign , Champaign, IL, USA Master of Science, Technology Management (CGPA: 3.96/4.0), Aug 2022 – Aug 2023	
	Osmania University , Hyderabad, India Bachelor of Engineering, Mechanical Engineering (CGPA: 7.72/10.0), Aug 2016 – Sep 2020	
SKILLS	<ul style="list-style-type: none">Programming & Data: Python (pandas, NumPy, scikit-learn), R (tidyverse, ggplot2), SQL, MATLAB, Excel (advanced)Cloud & Platforms: AWS (S3, Redshift, EMR, EC2), Databricks (Spark), ETL, data warehousingModeling & Analytics: regression, classification, time-series forecasting, A/B testing, feature engineeringVisualization: Tableau, matplotlib/ggplot2LaTeX, Jupyter, R Markdown, Git	
HONORS AND AWARDS	<ul style="list-style-type: none">University of Illinois: <i>Academic Excellence Medal</i>—Awarded to students in the top 5% of graduating class, 2023Awarded 1st place for poster presentation on Design and Fabrication of a Go-kart Racing Vehicle (funded at USD4160/INR 350,000) at Research Day 2019, Chaitanya Bharathi Institute of Technology, 2019	
TEACHING EXPERIENCE	Gies College of Business, University of Illinois , Champaign, IL <i>Course Assistant</i>	May 2023 – May 2024
	<ul style="list-style-type: none">Facilitated the operations of courses such as Strategic Management, Operations Management, and Project Management as a Course Assistant to Prof. Gopesh Anand, Prof. Ujjal Mukherjee, Prof. Sandra Corredor.Graded individual and group assignments weekly, ensuring detailed feedback aligns with educational standards and learning objectives.Managed and moderated the course Q&A forum, providing timely and accurate responses to student inquiries to facilitate understanding and engagement.	
PUBLICATIONS	Dr G Laxmaiah, P Anjani Devi, Dr Ch Indira Priyadarshini, Anirudh Kishan K , V Karthikeya Reddy and S Vijaya Bhanu Deepak. “ <i>Design and Analysis of Semi-Recumbent Bicycle</i> .” International Research Journal of Engineering and Technology (IRJET), Vol 9, Issue 6, 2022, pp. 2498-2505	
CONFERENCE PRESENTATIONS	Anirudh Kishan K , Harsha Pisapati, Md. Siddique Hussain, Sharanya Neelam. <i>Design and Fabrication of a Go-kart Racing Vehicle. Research Day, Chaitanya Bharathi Institute of Technology, 2019</i>	
PROFESSIONAL EXPERIENCE	Delight Consulting LLC , Detroit, MI <i>Data Scientist</i>	May 2024 – Sep 2025
	<ul style="list-style-type: none">Built VIN-level data products to ingest dealership warranty claims, service visits, and connected-vehicle telemetry and productionized Python/SQL/Spark pipelines with tests and version control.	

- Assessed OTA and field fixes with controlled rollouts and statistical checks to quantify impact on failure rates and warranty cost, and translated findings into recall and service recommendations.
- Developed early-warning and predictive-maintenance models for key components using gradient boosting and remaining useful life (RUL) modeling; delivered SHAP insights to quality engineers and dealers.
- Forecasted regional parts demand and tuned inventory policies at dealer/DC levels, improving service-level attainment and reducing stockouts and expedited freight via optimized safety stock and reorder points.

ZF Group, Hyderabad, India
Software Development Engineer

Jul 2020 – Jul 2022

- Implemented and tested customer requirement specifications using Model-Based software development in ZF's fourth-generation 8-speed powertrain system.
- Implemented Simulink model systems for Gear-shift control, Torque Converter clutch functionalities in the transmission systems.
- Reduced total development time by 30% by implementing a new technique of parallel development using side branches, resulting in 100% completion of tasks within the sprint.
- Implemented AWS Redshift for Telemetry Data analytics, enhancing the vehicle performance and software efficiency, achieving 24% decrease in maintenance issues.
- Enhanced team-wide understanding of the Telemetry data trends and the conclusions by building Tableau dashboards, thereby facilitating informed decision-making.

Mahindra Automotive, Hyderabad, India
Operations Data Analyst

May 2018 – Jun 2018

- Identified the root causes for oil leakage concerns in Mahindra's passenger vehicle product line by analyzing customer data in 5+ verticals.
- Performed in-depth statistical analysis on production and maintenance data to uncover trends and anomalies, leading to insights that improved the seal installation process.
- Developed and presented data visualizations and reports that helped management make data-backed decisions, contributing to a 17% reduction in annual maintenance costs through operational improvements.

ACADEMIC PROJECTS

Global Warming and CO₂ emissions: A Visual Analysis of Climate Change Impacts
Data Visualization

- Utilized Time-series analysis in Tableau to visually depict global surface temperature changes over decades, highlighting trends and anomalies.
- Implemented geographical heat maps to showcase regional impacts of climate change, emphasizing regions with significant temperature variances.
- Crafted interactive dashboards combining scatter plots and line graphs to explore correlations between CO₂ emissions and temperature rise facilitating user-driven data exploration.

Waymo Commercialization Strategy
Technology Strategy

- Analyzed Waymo's strategic partnerships with companies like Lyft, Avis, and Jaguar Land Rover to understand the integration and deployment of autonomous driving technology.
- Conducted a competitive analysis of the autonomous vehicle industry, highlighting Waymo's technological advantages and market position relative to competitors like Tesla and Uber.
- Explored new business models enabled by autonomous driving technology, including shared mobility and last-mile delivery, to identify potential growth areas for Waymo.
- Evaluated challenges in scaling autonomous vehicle operations, such as regulatory issues, cost barriers, and the need for extensive real-world driving data for technology refinement.