

# Adarsh Thoke

• +1 (949) 615-9700 • [adarshthoke.us@gmail.com](mailto:adarshthoke.us@gmail.com) • [linkedin.com/in/adarshthoke](https://www.linkedin.com/in/adarshthoke) • [github.com/adarshx06](https://github.com/adarshx06)

## EDUCATION

**University of Colorado Denver**, Master of Science in Computer Science (Thesis Track) (3.67/4.0) Aug '22- May '24  
*Relevant Coursework: Machine Learning, Computer Vision, Big Data Science, Artificial Intelligence, Deep Learning, Advance Computer Architecture, Operating Systems and Algorithms.*

**University of Mumbai**, Bachelor of Engineering in Information Technology (8.0/10.0) Aug '16- June '20

## EXPERIENCE

**Research Assistant** Sept '24 - Present  
*University of Colorado Denver, Supervisor: Prof. [Dr. Mazen Al Borno](#)* Remote

- Analyzed muscle coordination patterns across five distinct simulated tasks using advanced algorithms in MuJoCo/Myosuite; findings contributed to the development of more efficient training protocols for robotic limb functionality.

**Machine Learning Intern** June '23 - April '24  
*Global Technology Connection Inc., Supervisor: Prof. [Liang He](#)* Denver, CO

- Spearheaded ARADISS, a **NASA** funded research project on Anomaly Detection & Identification for Space Systems.
- Designed an XGBoost-based algorithm to differentiate cascaded and non-cascaded anomalies with 92% to 96% accuracy. Integrated detection and identification framework into a complete system, leveraging graph-based results.
- Incorporated **statistical** metrics to extract four new features from the electric propulsion system dataset, performed data preprocessing.
- Led cross-functional team meetings weekly with researchers and engineers and documented project milestones and methodologies. Earned **Distinguished Graduate Master's Capstone Award '24** for the research from the University of Colorado Denver.

**Software Engineer** Nov '20 - July '22  
*Reliance Jio Platforms Ltd* Navi Mumbai, India

- Developed new features including the integration of JIO clients, JIO business numbers page, and RESTful web services via Java Spring Framework for Customer Management Portal; facilitated promotional template distribution to over 400 million users.
- Optimized system performance by integrating Kafka for message handling and Redis for caching, reducing latency by 30ms. Documented the entire system for future scalability and maintenance.
- Collaborated with the Customer Experience Team to enhance product analytics and user experience for 3 products JioCare's live chat on WhatsApp, HelloJio, and MyJio, leveraging consumer behavior insights.
- Defined Key Performance Indicators (KPIs), tested 2000+ queries, and planned business strategies, resulting in an 8% increase in customer acquisition within three months.

## SKILLS

<b>Programming Languages:</b>	Python, Java, SQL, HTML, CSS, JavaScript
<b>Data Management:</b>	MySQL, MongoDB, Redis, Apache Kafka, PostgreSQL.
<b>Technologies/Tools:</b>	Pandas, NumPy, Matplotlib, JUnit, SpringBoot, Docker, Kubernetes, AWS, CI/CD, Sci-kit learn, PyTorch Django, Flask, Postman, TensorFlow, Git (Version Control).

## PUBLICATION

Adarsh Thoke, John Pace, Jubilee Prasad Rao, Liang He (2024), "Behavior-based Classification of Cascaded and Non-Cascaded Anomalies in Vehicular Systems." in ACM TRANSACTIONS ON SENSOR NETWORKS (TOSN).

## PROJECTS

**E-Commerce Website using Python and Django ([GitHub](#))** Python '24

- An end-to-end e-commerce website with 3 core functionalities like user identification, product creation, and cart functionality.
- Implemented features like user session management, checkout process, wishlist, and price filtering, enhancing the platform's user experience and serving over 1,000 users.

**Banking Transaction System ([Pvt. GitHub](#))** Java '24

- Created a transaction system using Java and the Spring Framework, adhering to MVC architecture.
- Implemented CRUD operations to manage transaction data and integrated event logging capabilities to ensure 100% accurate tracking and auditing of all transactions.

**Student Performance Indicator ([GitHub](#))** Data Science '24

- Trained 5 different models like Decision Tree, K-nearest neighbors, boosting, and bagging models, performed EDA, data transformation, and designed a data pipeline deployed on Microsoft Azure.
- Achieved optimal model selection using R-squared (R2) metrics to capture variability in student performance data.

**Dynamic Pricing of food products to reduce wastage ([GitHub](#))** Machine Learning '22

- Conceptualized pricing reduction strategy using parameters like expiry dates to enhance sales and minimize discarded inventory.
- Generated a dataset with 1000+ different food products, did data mining, and data modeling using supervised learning (Linear Regression).