

UTKARSH AMBANI

utkarsh.ambani09@gmail.com | www.linkedin.com/in/utkarshambani | +91 9833262506 | +16143612073

EDUCATION

The Ohio State University, Columbus, USA

Aug 2023 - May 2025

Master of Science in Computer Science and Engineering ~ CGPA 3.3/4

- Relevant Coursework: Foundations of Programming Languages, Parallel Computing, Data Mining, Advanced Operating Systems, Mobile Application Development, Algorithms, Software Engineering for AI.

Atharva College of Engineering, University of Mumbai, Mumbai, India

Aug 2019 - May 2022

Bachelor of Engineering in Electronics with Distinction ~ CGPA 8.55/10

- Relevant Coursework: Object-oriented programming, Database Management System, RTOS, Computer Organization & Architecture, Cyber Security and Laws, Internet of Things.

SVKM's Shri Bhagubhai Mafatlal Polytechnic College, Mumbai, India

Aug 2017 - May 2019

Diploma in Computer Engineering with Distinction

- Relevant Coursework: Programming in C++, Data Structures and Algorithms, System Programming, Fundamentals of Operating Systems, Database Management System, Advanced Network Administration, Data Warehousing, Software Design.

EXPERIENCE

Graduate Researcher | Ohio State University, Columbus OH

Aug 2024 – April 2025

- Simulated inertial sensor data for powered wheelchairs using NVIDIA Isaac Sim to train classification models and assess the reciprocal performance of real vs synthetic sensor data.
- Performed data preprocessing, augmentation, and analysis to compare synthetic and real-world data fidelity.
- Explored applications of simulation-based training for robotics and assistive technology.

PROJECTS

MiniStore – E-commerce Cart App (React, Tailwind) – *In progress*

2025

- Building a responsive shopping cart web app using React to simulate a simplified e-commerce experience.
- Implemented product listing, dynamic cart logic (add/remove, quantity control), and responsive UI with Tailwind CSS.
- Planning to integrate LocalStorage for cart persistence and basic checkout preview flow.

FoodNutrition (Android App)

2024

- Developed a calorie tracking and recipe search Android app using Java.
- Implemented authentication (Create Account, Login) and dual-language support for accessibility.

Hospital Data Analytics for Pediatric Diagnosis

2024

- Analyzed hospital data (2016-2021) to identify patterns in pediatric appendicitis cases.
- Applied CRISP-DM methodology to clean, preprocess, and prepare the dataset.
- Used classification models to predict 'Diagnosis' and provide actionable insights.

TECHNICAL SKILLS

- Programming Languages: Java, JavaScript, SQL.
- Frameworks and Libraries: React, Node.js, Scikit-learn, Pandas, NumPy, PyTorch.
- Tools & Platforms: Git, GitHub, Android Studio, NVIDIA Isaac Sim, Docker, Oracle SQL, AWS EC2.
- Environments: Jupyter Notebook, Tailwind CSS, LocalStorage.