# Aditya Patel

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## Education

**University of Michigan College of Engineering** — Ann Arbor, MI

*B.S.E in Computer Science and Engineering* — *Expected Graduation: May 2026*

- **Cumulative GPA:** 3.8/4.00
- **Relevant Courses:** Object Oriented Programming, Linear Algebra, Differential Equations, Discrete Mathematics, Data Structures and Algorithms, Business Analytics and Statistics, Theory of Computation
- **Honors:** Dean's List, University Honors, Tau Beta Pi First Year Engineer's Award
- **Dual Major Business Administration student at the Stephen M. Ross School of Business**

## Experience

**Ford Motor Company** — Dearborn, MI

*Data Software Engineering Intern* — *May 2023 - Present*

- Designed and developed algorithm to to measure performance of Ford big data queries within Google Cloud Pipeline, parsing over 200 Terrabytes of project metadata in design testing process within Relational Databases
- Launched and trained a statistical analysis model to evaluate run time on big data transfers, queries, or processes, correctly identifying 91% of new query performances within a Ford project environment
- Utilized model framework to integrate monitoring automation into various scheduled query applications within a Ford project ecosystem, decreasing post-query error detection time to under 120 seconds

**Ford Motor Company** — Dearborn, MI

*Data Engineering Intern* — *June 2022 - Aug 2022*

- Developed competencies in Machine Learning tools such as Google Cloud Platform, Jupyter Notebook, Terraform, and XGBoost for model prediction under Ford Mach 1 ML model team consisting of 18 members
- Managed and executed machine learning model predictions inputting housing information parameters in order to output projected house prices using Boston Housing dataset at 91% success rate
- Tuned model's hyperparameters in hyperparameter optimization to refine model learning process through testing process, enhancing accuracy of model predictions by 20% and prediction efficiency

**Ford Motor Company** — Dearborn, MI

*BlockChain Applied Research Intern* — *June 2021 - Aug 2021*

- Obtained proficiencies in Ethereum-based blockchain software tools such as Truffle, Ganache, Solidity, and MetaMask to expand development capabilities in handling blockchain based transactions with efficiency
- Applied research and findings to build decentralized application (dApp) allowing users to donate cryptocurrency to charities using ReactJS and MetaMask, handling 50 ETH in transactions through testing and integration process
- Concluded workshop covering Interactive UI development using React JS, HTML, CSS, and Javascript framework tools to raise user interaction and platform engagements by 20%

## Projects

**Chipotle Free Pointer Burrito Bot**

*Lead Developer* — *Fall 2022*

- Developed an automated bot to scrape live free burrito codes from Chipotle's tiwtter account during NBA Finals and automatically text them over SMS to win limited free burritos using BeutifulSoup and Twillo REST APIs

**Autonomous Drone Flight Controller**

*Lead Developer* — *Fall 2022*

- Engineered and implemented autonomous flight controller system to deliver Covid testing kits to mitigate Covid-19 spread and limit strain on University Health System using Python, Arduino, and Virtual Environments

## Programming Skills

**Languages**: C++, Python, Java, Javascript, HTML/CSS, SQL, Microcontroller Development, MS Office
**Frameworks**: React, GCP, XGBoost, BigQuery, Git, MetaMask, Agile, Dev Lifecycle, Looker Studio