

# KUSH K. PATEL

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## EDUCATION

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### University of Michigan - School of Engineering

Ann Arbor, MI

Undergraduate Student - Bachelors of Engineering

Graduation: April 2026

- Major: Computer Science
- Relevant Coursework: Discrete Math, Programming and Intro Data Structures, Data Structures and Algorithms, Computer Organization, Computational Theory, Web Systems, Artificial Intelligence, Software Engineering

## EXPERIENCE

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### Ford Motor Company

Dearborn, MI

Software Engineering Intern

May 2024-August 2024

- Develop and Automate several PC support procedures using various PowerShell scripts and Power Automation for the Enterprise IT Solutions team helping ease the process of onboarding 500+ PCs and reducing update times by 75%.
- Build and maintain two major web applications using Ford Cloud Web and various Dev/Ops tools, including Java and Spring Boot, to streamline site IT management operations and automate system monitoring.
- Implement migration of several applications from PCF to GCP to enhance interoperability with other GCP-hosted systems to help facilitate smoother data integration and system communication.

### Ford Motor Company

Dearborn, MI

Software Engineering Intern

May 2023-August 2023

- Created Python scripts to construct a data pipeline through GCP allowing successful data migration of over 1.5TB of data from Ford's internal database to E2open software for Ford's Supply Chain Digitization team.
- Crafted SQL scripts to construct ticketing UI that retrieved and escalated performance requests from suppliers.
- Applied various testing tools such as Postman to develop comprehensive API and UI tests, successfully identifying and mitigating 50+ potential issues, enhancing system reliability by 35%.

### Ford Motor Company

Dearborn, MI

Software Engineering Intern

June 2022-August 2022

- Developed JavaScript scripts to construct/alter numerous Agile applications for Ford's Plan and Integrate team.
- Utilized various DevOps applications, including Grafana and Jenkins, to customize the UI presentation for vendors, incorporating graphs and pipelines improving project monitoring up to 15%.
- Altered numerous repositories to up-to-date build process employing a Git-centric approach with systematic branching, version tagging, and submodules for efficient dependency management.

## PROJECTS

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### KP-Planning

- Built KP-Planning, an intelligent trip planning service with an easy-to-use Next.js UI, and leveraged advanced AI algorithms to ensure the itinerary matches your interests.
- Curates the perfect vacation by dynamically adjusting itineraries based on group size, budget, current events, and weather conditions, ensuring a personalized and adaptable travel experience.
- Helped plan over 400 trips across various countries, storing trips in a MongoDB database to monitor preferences and continually enhance recommendation capabilities.

### WarCraft

- WarCraft is an interactive video game where players can create and expand an army of unique characters, each with different qualities, to battle against a skill-based bot to level up and unlock new features.
- Players interact with the dynamic Qt-based UI to craft battle strategies and control their army count, with past battle analytics stored for review, enabling them to refine their gameplay.

## Skills

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**Languages:** C, C++, Python, SQL, HTML, CSS, Java, JavaScript, Mathematica, MATLAB, PowerShell

**Frameworks:** Flask, QT Framework, Spring Boot, React, Next.js, Node.js, Express

**Tools/Technologies:** PyCharm, Eclipse, Jupyter Notebook, VS Code, Git, Jenkins, Agile (Scrum), Rally, GCP, Power Automate, Grafana, Qlik Sense, Alteryx, SQL Dashboard, Postman, MongoDB