Kush Patel

1467 Pennfield Lane | Canton, MI 48188 # US Citizen | → (734) 881-3768 | → patkush@umich.edu | LinkedIn | Github | Portfolio

EDUCATION

University of Michigan - Ann Arbor

BS Computer Science | GPA: 3.8/4.0

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

EXPERIENCE

Capital One

McLean, VA

Incoming Software Engineering Intern

May. 2025 – Aug. 2025

Graduation Date: May 2026

Ford Motor Company

Dearborn, MI

Software Engineering Intern

May. 2024 - Aug. 2024

- o 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%.
- o 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.
- o 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 – *Aug.* 2023

- o 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.
- O 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 May. 2022 - Aug. 2022

Software Engineering Intern

- O Developed JavaScript scripts to construct/alter numerous Agile applications for Ford's Plan and Integrate team.
- O 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

KP-Planning

- O Built KP-Planning, an intelligent trip planning service with an easy-to-use Next. 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

- O 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.
- o 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

- O Languages: C, C++, Python, SQL, HTML, CSS, Java, JavaScript, Mathematica, MATLAB, PowerShell
- Frameworks: Flask, QT Framework, Spring Boot, React, Next.js, Node.js, Express
- o Tools/Technologies: PyCharm, Eclipse, Jupyter Notebook, VS Code, Git, Jenkins, Agile (Scrum), Rally, GCP, Power Automate, Grafana, Olik Sense, Alteryx, SQL Dashboard, Postman, MongoDB