# HARSH PATEL

1946 Wildwood Cir, Glendale Heights, IL 60139

3 630-903-9370 ■ harshkpatel2002@gmail.com | linkedin.com/in/harshkpatel2002 | github.com/harshkpatel2002

#### Education

DePaul University Sep. 2020 – Dec. 2023

Bachelor of Science in Computer Science, Minor in Mathematics

Chicago, IL

GPA: 3.91

#### Relevant Coursework

• Analysis of Algorithms

• Data Structures

• Computer Systems

• Database Systems

Distributed Systems
Object Oriented Development

# Experience

# Amazon Alexa

June 2023 – September 2023

 $Software\ Development\ Engineer\ Intern$ 

El Segundo, CA

- Developed a WebUI using Axum in Rust to enhance internal developer efficiency, enabling users to access multiple endpoints
- Created a robust and scalable fargate container for hosting the web application using AWS CDK and TypeScript
- Leveraged CDK code to streamline the deployment process by directly deploying Docker images to an ECR (Elastic Container Registry)
- Collaborated with cross-functional teams to quickly address and fix flagged results, ensuring prompt resolution and continuous improvement
- Successfully improved the efficiency of the internal developer workflow, resulting in a 87.5% increase in productivity and overall user satisfaction

### **Technical Skills**

Languages: Python, Java, Rust, Swift, C, HTML/CSS, SQL, TypeScript

Developer Tools: VS Code, Xcode, Amazon Web Services, Git

Technologies/Frameworks: Unix, AWS CDK(Cloud Development Kit), Django, UIKit, SwiftUI, Node.js, PostgreSQL

# **Projects**

#### Medication Reminder App | SwiftUI, EventKit, UserNotifications

- Developed a medication reminder app using SwiftUI, EventKit, and UserNotifications to provide users with timely notifications about their medicine schedules
- Integrated EventKit framework to link medication reminders with users' calendars, ensuring seamless synchronization of medication schedules
- Implemented UserNotifications framework to deliver personalized notifications to users, including reminders for medication intake and important updates
- Designed the app's user interface with SwiftUI, enabling an intuitive and user-friendly experience for viewing medication details, such as purpose and common side effects

# Travel Planner Website | Django, AWS, PostgreSQL, HTML/CSS

- Led a group project to develop a Travel Planner web app using Django, deployed on AWS EC2, providing users with personalized travel itineraries
- Integrated OpenAI GPT 3.5 API to generate custom travel itineraries, leveraging natural language processing to curate recommendations for activities, sightseeing, and dining options
- Utilized Amadeus API to seamlessly integrate booking and activity information, allowing users to explore and reserve flights, accommodations, and local experiences
- Implemented PostgreSQL to store previous trips, enabling users to access their travel history and review past itineraries for reference and future planning.
- Deployed the web app on Nginx, ensuring optimal performance and scalability, while utilizing HTML, CSS, Bootstrap, Ajax, and JavaScript to create an engaging and responsive user interface.

#### Jetpack Joyride Clone | Rust, Macroquad

- Created a random obstacle generation system to dynamically create obstacles as the user progresses through the game, ensuring endless gameplay and increasing difficulty.
- Designed an intuitive user interface and responsive controls, enabling smooth and immersive gameplay, while maintaining a similar feel to the original Jetpack Joyride game.
- Implemented a distance tracking feature, allowing users to see how far they have traveled within the game and compete for high scores.