Samarth Parekh

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Education

University of Maryland College Park, MD
Bachelor of Science in Computer Science, Minor in Mathematics *December 2026*
Relevant Coursework: Data Structures & Algorithms, Object Oriented Programming & Design, Computer Systems, Quantum Information, Bioinformatics, Linear Algebra, Calculus I, II, & III, Discrete Structures, Abstract Algebra, Probability & Statistics

Experience

Software Engineer Intern June 2025 - Present
StoneX — Apex, Salesforce, Python *New York, NY*
- CRM + Gen AI Team

Quantum Machine Learning Engineer February 2025 – May 2025
IonQ | Python, Pennylane *College Park, MD*
- Developed hybrid quantum-classical machine learning algorithms for image classification by leveraging IonQ's Aria and Forte QPUs to compare the efficiency of classical and quantum models on the MNIST dataset
- Optimized feature reduction techniques for quantum machine learning, enabling improved performance of quantum support vector machines and generative adversarial networks on resource-limited quantum processors

Software Engineer Intern June 2024 – May 2025
US Food and Drug Administration | Python, Dash, TypeScript *College Park, MD*
- Designed and implemented a Python/Dash synthetic-data generator to aid in streamlining the data generation and testing process, reducing manual test-data prep time by 30%
- Authored detailed system and API documentation for global engineering teams of an open-source tool to enable global agencies to address traceability concerns, achieving a reduction in manual labor across 10+ international organizations
- Presented a poster to 200+ people at the FDA Foods Program Regulatory Science Conference to highlight the current effort and innovative approach in enhancing global traceability efforts through open-source collaboration

Software Engineer - Tech Lead September – December 2024
Warriors Legacy Care | React Native, Flask, PostgreSQL, AWS, Google Gemini, Figma *College Park, MD*
- Led a 10-member team of engineers in developing a fullstack React Native mobile application to provide essential services to veterans, including care facilities, mental health services, and veteran messaging
- Built an AI-powered resume reviewer that analyzes uploaded resumes using Google Gemini, provides tailored suggestions, and recommends roles based on user profiles, integrated with a web scraper for real-time job postings
- Integrated WebSockets and Geolocation to provide real-time location, user messaging, and enabling dynamic service provider mapping and appointment scheduling via RESTful APIs

Projects

EcoNavix | AI-Drive Route Optimization | *React.js, Python, Flask, OpenAI* View Code
- Reduces carbon emissions by up to 35% for supply chain logistics through real-time data integration from traffic, weather, and emissions APIs, including OpenRouteService and Carbon Interface
- Engineered a Flask-based backend that integrates multiple APIs, dynamically optimizing routes and providing AI-driven recommendations for minimizing environmental impact and enhancing operational efficiency

TrackMyMoney | Financial Transaction Tracker | *MongoDB, Express, React, Node.js, Postman* View Code
- Created a transaction tracker with CRUD functionality to enable efficient management of transactions
- Engineered a high-performance full-stack application by designing an interactive React frontend and implementing an Express API, optimizing transaction retrieval and storage with MongoDB for seamless data management and smooth server-side operations with Node.js

SmartCards.ai | AI Flashcard Creator | *Next.js, OpenAI, Stripe, Clerk, Material UI, Firebase* View Code
- Built a SaaS platform for generating and managing AI-powered flashcards, leveraging Next.js for the frontend, Clerk for user authentication, and Firebase for real-time data storage and user engagement analytics
- Implemented OpenAI's API to dynamically generate flashcard content based on user input, and integrated Stripe for payment processing to allow for subscription-based access to features

MyPA | Personal Voice Assistant - HackDefy | *Python* View Code
- Built a robust personal voice assistant with 10+ interactive features with integrated advanced text-to-speech and web scraping capabilities, enhancing user productivity and engagement cutting task completion time by 30%
- Achieved 4th place out of 25+ submissions at HackDefy for innovative features and seamless user interaction

Technical Skills

Languages: Python, Java, JavaScript, TypeScript, HTML/CSS, C, C++, MATLAB, SQL
Libraries and Frameworks: React.js, React Native, Spring Boot, Node.js, Express, Flask, Stripe, NumPy, Pandas, JUnit
Developer Tools: Command Line, Git, GitHub, Postman, Firebase, MongoDB, AWS, Google Suite, Microsoft Platforms, Linux