Sufyaan Mohammed

New York, 10467
smohamm017@citymail.cuny.edu | 718-902-2947 | LinkedIn | Portfolio

EDUCATION

City College of New York, The Grove School of Engineering **New York, NY**
Candidate for Bachelor of Science – Computer Science Anticipated Graduation: May 2027
Relevant Courses: Introduction to Computing for Majors, Computer Systems, Discrete Mathematics, Data Structures, Probability & Statistics

SKILLS

Languages: Python, JavaScript, TypeScript, C++, Java, SQL
Technologies: React, Node.js, Next.js, TensorFlow, NumPy, pandas, OpenAI API, Firebase, PostgreSQL, Socket.IO, AutoCAD

WORK EXPERIENCE

Headstarter AI **Bronx, NY**
Software Engineering Fellow *August 2024 - September 2024*
- Built 5+ AI apps and APIs using Next.js, OpenAI, Pinecone, and Stripe; mentored by FAANG engineers.
- Won a hackathon hosted by a TikTok hiring manager for a TikTok clone, earning a referral for internships.
- Engineered AI-powered full-stack apps with machine learning models, NLP, and responsive UI/UX design.

BlackRock **New York, NY**
Aladdin Product Intern *July 2024 - August 2024*
- Developed and familiarized with Aladdin, focusing on products like Risk Radar to solve financial data challenges.
- Partnered with various teams to analyze datasets and propose enhancements aligned with Aladdin's platform
- Designed and presented a conceptual Aladdin ecosystem product, detailing system functionality, data flows, and potential user impact.

Technology & Operations Intern *July 2023 - August 2023*
- Utilized Aladdin's analytics tools to process and interpret financial and operational data for cross-functional projects.
- Mapped the Institutional Client Journey by translating business needs into structured workflows and processes.
- Shadowed engineering teams to learn large-scale financial systems, data pipelines, and platform architecture.

Columbia University **New York, NY**
Columbia E.N.G. Research Intern *June 2022 - August 2022*
- Collaborated with faculty and doctoral candidates on AI/ML applications in Civil and Mechanical Engineering.
- Developed Python simulations using material data to model stress–strain behavior and predict failure thresholds.
- Presented noise analysis findings to the Columbia faculty over a six-week research period.

PROJECTS

Smart Transit System *October 2025 - Present*
- Built a real-time NYC transit visualization platform using Next.js and Leaflet.js, rendering GTFS subway and bus routes with dynamic geo-mapping.
- Integrated OpenAI APIs to generate congestion patterns, natural-language trip assistance, and route explanations
- Developed Node.js pipelines to process GTFS and GTFS-RT feeds, enabling accurate schedule alignment and continuously updated transit overlays.

Parking Ticket Bot *September 2025 - Present*
- Created an AI-powered ticket analysis tool using Python, OpenAI Vision, and Tesseract OCR to extract violation details, timestamps, and signage data.
- Integrated the NYC Open Data API's to verify street regulations and detect procedural errors in issued tickets.
- Added Twilio-based alerts and a MySQL tracking system to monitor appeal outcomes and measure success rates.

Blogify *October 2024*
- Constructed a modern blogging platform featuring a TikTok-style interface and Twitter-like functionality for dynamic text and image posting.
- Integrated MySQL for efficient data storage and retrieval; implemented Firebase for secure user authentication
- Deployed Socket.IO for real-time notifications, enhancing user engagement with instant updates on interactions.

Flashcard SaaS Application *August 2024*
- Developed a full-stack flashcard generation service using Next.js, integrating OpenAI's GPT for automation
- Utilized Firebase for user authentication and data storage, ensuring secure and scalable backend operations.
- Designed an intuitive UI for flashcard creation, studying, and progress tracking to improve learning efficiency.