

Peter Yeshua Sotomango

Software Engineer • Backend Developer • Web Developer • Machine Learning Engineer

✉ sotomango.23@outlook.com ☎ +97455382177 💻 pysotomango 🐙 PeterTheMango

Experience

Student Assistant

9/2023 - Present

CCIT Help Center, University of Doha For Science and Technology

Doha, QA

- Support students directly during lab sessions, providing **1:1 guidance** on course concepts, troubleshooting assignments, and offering peer tutoring sessions (**200+ students served**).
- Facilitate the **CCIT Help Center**, managing bookings, supporting walk-ins/appointments, and ensuring compliance with center policies.
- Lead **recap/review sessions for 200+ students**, reinforcing key topics to strengthen understanding and improve overall academic performance.

Research Assistant

7/2025 - 8/2025

University of Doha for Science and Technology & Columbia University

- Conduct desk research on the **implementation of AI in Qatar's healthcare sector**, analyzing adoption trends, infrastructure readiness, and regulatory context.
- Evaluated the region's **digital infrastructure**, including health data exchange platforms, cloud providers, and training centers, to assess AI integration potential.
- Collaborated with an international research team to produce insights on how **emerging technologies can improve healthcare delivery and policy in Qatar**.

Software Engineer

2/2025 - 7/2025

Cleano L.L.C.

Doha, QA

- Built an **internal admin-management system** in *Next.js* and *Firebase* that handles partner integrations, version control, maintenance-mode toggles, and role-based admin access.
- Established **GitHub Actions CI/CD** pipelines to automatically build, lint, and test on every push to main, **reducing deployment errors by ~80%** and accelerating release velocity.
- **Rewrote and optimized API authentication flow** by implementing **token caching and simplifying validation logic**, reducing average API latency by **50%**.

Student Volunteer

2022 - 2024

University of Doha For Science and Technology

Doha, QA

- Supported **10+ large-scale university events** (Open Day, Orientation, Graduation, Career Fair, etc.), assisting **~1000+** attendees with registration, campus tours, logistics, and guest services.
- **Led and coordinated 15+ volunteers** at an international AI symposium, delegating tasks and ensuring smooth event flow across multiple venues.
- Assisted university leaders, prospective students, and parents with inquiries while also **curating official social media** content to promote engagement.

Hardware Lab Assistant

3/2023 - 9/2023

CCIT, University of Doha For Science and Technology

Doha, QA

- Upgrade hardware components on **100+** CCIT lab systems—installing RAM, processors, and peripherals—to maintain optimal performance.
- Maintain software on **100+** CCIT workstations by applying OS updates and configuring software images to ensure system reliability.

Hackathons

Innovation Program Participant - Qatar Innovation Program, Athar Events, 8/2025

- Led a multidisciplinary team in developing **TupperCare**, a smart food container that integrates **sensors, microcontrollers, and a mobile app** to monitor freshness and predict spoilage using machine learning.
- Designed and prototyped the **hardware architecture and mobile application**, selecting sensors, and building the initial app/device prototype.
- Researched and implemented **reliable data transfer methods (MQTT, HTTP)** to ensure functionality under limited connectivity, while also **pitching the project and advancing to the 2nd round of competition**.

5th Place Winner - Lifelines '25, 2/2025

- Built an **IoT wristband prototype** using Arduino/ESP32 and LoRa mesh networking to capture and transmit GPS coordinates of disaster victims to an offline-ready Raspberry Pi hub.
- Co-developed a **React Native (Expo) mobile app** that visualizes victim locations, assigns rescue squads, and prevents duplicate rescues to improve efficiency during crisis response.
- Optimized device firmware and LoRa payloads to operate within **strict memory and bandwidth limits**, ensuring reliable long-range communication under low-connectivity conditions.

Top 10 Finalists - ACT28 AI for Climate Hackathon, 5/2024

- Designed and prototyped **Flood Alert**, an AI-powered service leveraging **neural networks, satellite image recognition, and real-time data** to detect flooded zones and integrate alerts into navigation apps (e.g., Google Maps, Waze).
- Demonstrated potential to **reduce e-waste from EV battery failures during floods**, addressing both climate resilience and sustainability challenges.

Education

B.A.Sc in Data Science and Artificial Intelligence

7/2022 - 2026

University of Doha for Science & Technology

Doha, QA

- GPA: **3.64**
- Relevant Coursework: **Machine Learning, Parallel and Distributed Computing, IoT Application Development, Data Visualization and Analytics, Deep Learning, Applied Data Mining, IoT Application Development**

Skills

Programming Languages

Python • Javascript • HTML • CSS • SQL • MongoDB • NodeJS • Java

Design

Figma • Power BI • Video Editing • Photo Editing • Canva

Frameworks and Cloud Platforms

NextJS • Firebase • React Native • Google Cloud Platform • Microsoft Azure • Oracle Cloud

Certifications

- 📄 **Javascript (Intermediate)** - Hacker Rank, 9/2025
- 📄 **Javascript (Basic)** - Hacker Rank, 9/2025
- 📄 **Python (Basic)** - Hacker Rank, 2/2025
- 📄 **Network Security Fundamentals** - Palo Alto Networks, 4/2024
- 📄 **Cybersecurity Foundation** - Palo Alto Networks, 2/2024