

Mark Samuel

LinkedIn – Github – Podcast

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EDUCATION

- **University of Science and Technology at Zewail City**

Bachelor of Computer Science Majoring in Data Science and AI

October, EG

Oct 2022 – June 2026

EXPERIENCE

- **ISchool**

Coding Instructor

Remote

June 2024 – Aug 2024

- **Programming:** Taught 6th grades basic programming and basic concepts.
- **Python:** Taught 6th grades python.
- **AI and ML:** Taught 6th grades basics of AI and ML.

- **Steigenberger AL DAU Beach Hotel**

IT Trainee

Hurghada, EG

June 2023 – Aug 2023

- **Hotel Infrastructure:** Understood hotel's infrastructure.
- **PC Maintainance:** Maintained the PCs and other devices.
- **Network devices:** Maintained network devices and cables.

PROJECTS

- **Video Slideshow (Github):** A cross-platform Electron app for creating dynamic video slideshows. It allows users to bind text slides to video backgrounds using Node.js, HTML, CSS, and FFmpeg.
- **Deep Fake Image Detector (Github):** A deep learning project designed to detect whether an image is real or generated. Incorporates advanced models such as Inception and ResNet for high accuracy.
- **Face Attendance Application (Github):** A cross-platform, local-first React Native app for face recognition-based attendance tracking. Powered by Facenet with TFLite and ONNX frameworks (Java implementation), and stores attendance data in a vector database that is based on SQLite.
- **Activity Detection Using MHealth (Github):** A machine learning project for classifying user activities based on accelerometer and gyroscope data. Includes EDA for the sensor data. Utilizes algorithms such as KNN, SVM, Logistic Regression, and Neural Networks.
- **Company Dashboard (Github):** A data visualization dashboard for analyzing company performance trends over time. Built with Python, Flask, and AmCharts to deliver interactive and insightful visualizations.
- **Schedule to Ical (Github):** A web scraper that converts schedules from Ellucian™Self-Service into ICS files, enabling seamless integration with calendar providers. Uses puppeteer to scrape your self-service dashboard to get the data
- **Adagrad TensorFlow Implementation (Github):** An implementation of the Adagrad optimization algorithm from scratch as a TensorFlow optimizer, showcasing a deep understanding of optimization techniques. as a project for Linear and non linear programming course
- **Cakery (Github):** A full-stack software engineering project featuring Python and flask for the server, PostgreSQL, Firebase push notifications, Next.js, Docker, and CI/CD pipelines to deliver robust and scalable solutions.
- **Smart watch Reverse Engineering (Github):** Reverse engineered a smart watch to get heartrate data on my PC. Utilized Bluetooth Low Energy (BLE) and Generic ATtribute Profile (GATT) to read the data. Utilized electron to create cross-platform app. HTML, CSS, Bootstrap, and JS