

EDUCATION

- **Applied Technology School for Nuclear Energy** El-Dabaa, Matruh
Electronics Major; Graduation Year: 2026; Current GPA: 4.0; Oct. 2021 – Present

EXPERIENCE

- **Storiza Group** Mersa Matrouh, Matruh, Egypt
Founder & CEO & Developer May 2022 – Present
 - Developed a scalable containerized application hosting service, based on **Kubernetes** and **CEPH** distributed file system.
 - Built a backend infrastructure using **Java Spring Boot**, **PostgreSQL**, and **Redis** for efficient microservices deployment.
 - Built frontend client-side application for managing and deploying user application applications.
- **Pioneer Academics** Jenkintown, PA, United States
Research Internship in Computer Vision Feb 2025 – Aug 2025
 - Conducting research in **low-cost robotics navigation using computer vision** under Macalester College Professor **Susan Fox**.
 - Completing the **INST 099 research course**, with **4 college credits** offered by Oberlin College.

PROJECTS

- **ATSNEE School Website**: Designed and developed a responsive website for my school using **Next.js**, **Tailwind CSS**, and **Payload CMS**. Applied accessibility and user experience principles, enhancing usability for all visitors. The platform has reached **5,000+ visitors**, including prospective students and parents.
- **Sell4spot**: Built a digital marketplace platform enabling users to buy and sell second-hand items. Developed using **MERN stack (MongoDB, Express.js, React.js, Node.js)**, with secure authentication and payment integration.
- **Plasma Knights**: Developed a **data science and machine learning** project for predicting and analyzing **Magnetic Reconnection**, a space phenomenon. Implemented two types of tests: **Coordinates tests** and **LMN tests** to enhance predictive accuracy and analysis.
- **Autonomous Drone for Radiation Monitoring**: Built an AI-powered drone for **automated radiation workplace monitoring**, utilizing **monocular depth estimation** for navigation. Designed deep learning-based **vision-based path planning** to avoid LiDAR interference from gamma radiation.

AWARDS

- **Pioneer Academics Research Scholarship**: Awarded a \$6,850 scholarship for the Oberlin-accredited Pioneer Research Program
- **NASA Space Apps Challenge - Global Finalist**: Led a team to develop an application for analyzing **Magnetic Reconnection**, ranking among the **top 500 out of 12,000+ teams worldwide**.

PROGRAMMING SKILLS

- **AI/ML**: Python, TensorFlow, PyTorch, Computer Vision
- **Frontend Technologies**: React.js, React Native, Next.js, Tailwind CSS, SASS, Chakra UI, API Integration, React Router
- **Backend Technologies**: Java, Java Spring Boot, Express.js, SQL, MongoDB, Redis, REST APIs