

# Maliha Sara

✉ smaliha275@gmail.com [in](#) malihasara [G](#) malihasara [P](#) portfolio

## EDUCATION

---

### New York University

Expected Graduation: May 2028

*Bachelors of Science in Electrical and Computer Engineering*

- *Minor: Mathematics, Management* | GPA: 3.7
- Awards: Dean's List 2024-2025, Romanelli Scholarship Recipient for Class of 2028 (one recipient per class)
- Coursework: Data Structures and Algorithms, Object Oriented Programming, Electronics 1, Computer Architecture and Organization, Introduction to Databases, Foundations of Technology Management, Project Management

## PROFESSIONAL EXPERIENCE

---

### Consolidated Edison

Jul 2024 - Present | New York, NY

*SCADA System Analyst Intern*

- Built 4 PI Vision dashboards (2 yrs vault telemetry) reducing system fault-diagnosis time by 30%
- Pushed configuration releases to SCADA back-end on Linux, using shell scripts to move changes from test to prod
- Built 8 AF hierarchies with 500+ PI tags for network protectors, enabling lineage-based search in PI Vision
- Led two incoming intern cohorts, assigning tasks and guiding project execution under manager supervision

### New York University

Jun 2025 - Present | New York, NY

*EG-1004 Teaching Assistant*

- Led programming labs teaching C++ fundamentals, debugging, and modular design for embedded systems projects
- Guided 50+ teams building user-scoped software-hardware projects through iterative development and code quality
- Reviewed student code and designs, providing technical feedback to improve reliability and implementation quality

### Consolidated Edison

Jun 2023 - Jun 2024 | New York, NY

*Distribution Engineering Aide Intern*

- Analyzed voltage/current signals and circuit protection trends using PI Vision supporting fault diagnostics
- Programmed SCADA modems and used eGIS ArcFM to analyze pole and plate infrastructure data
- Maintained and optimized a vault-certification tracker for ~300 network protectors
- Created technical diagrams and presentations on Brownsville Battery Storage and substation protection

## PROJECTS

---

### NYU Wireless — 6G Wireless Subteam

- Designed and validated a SOLT calibration kit in ADS for accurate S-parameter de-embedding of a Lange coupler, improving RF measurement accuracy and enabling reliable device characterization
- Trained ML models in Python to predict RF signal variation from human position and movement in indoor environments

### 2048 Replica [P](#)

- Developed the game using JavaScript, HTML, and CSS, featuring smooth animations and a responsive UI
- Utilized local storage, project decomposition, and higher-order programming to create modular game logic

### Snake Game [P](#)

- Engineered Snake in Python (Pygame) leveraging OOP and modular architecture for scalability and maintainability
- Optimized game loop with efficient collision detection, state management, and dynamic difficulty scaling

### Automated Retainer Cleaning System

- Programmed Arduino in C++ and built circuitry integrating sensors and Wi-Fi module for automated control system
- Collaborated with 3 teammates on hardware integration and programming; contributed to Fusion 360 CAD design

### Remote Control Car

- Designed and built a Bluetooth-controlled RC car using Arduino, Raspberry Pi, and C++
- Modeled custom circuits and made components in AutoDesk Inventor, assembling a multi-layered chassis

## SKILLS

---

**Languages** — Python, C/C++, Java, Javascript, HTML/ CSS, SQL, G & M Code, Verilog

**Hardware** — ADS, HFSS, Arduino, Soldering, Circuit Design, PSpice, Multisim, Oscilloscopes

**Tools & Software** — Git/GitHub, PI Vision, MySQL, Microsoft Access, Excel, eGis ArcFM, Power BI, CAD: Fusion 360