Hannah Elisa Ocampo

New York City, NY

hannahocampo1163@gmail.com | +1 (571)245-4041 | https://www.linkedin.com/in/hannah-elisa-ocampo

Education

New York Institute of Technology - Manhattan, NY May 2025
B.Sc. in Electrical and Computer Engineering, Minor in Mathematics

- **GPA:** 3.9/4.0
- **Awards:** Presidential/Dean's Honor List for Fall 2021- Spring 2025 semesters, Magna Cum Laude

Skills

Programming Languages: Java, Matlab, C, Python, HTML, CSS, JS, Ubuntu Linux
Technologies: Microsoft Offices, VSCode IDE, Eclipse IDE, Keil 805, MATLAB, PSoc Creator IDE, Electronic Design Automation tools (PSpice/ LTSpice, Multisim), Verilog

Projects

Patient Management System Jan. 2024 – May 2024

- Developed a java-based patient management system with features including patient record management, data addition, deletion, and average age calculation with use of object-oriented programming structure. Utilized text file storage for efficient data handling using data structures knowledge.

Active Noise Cancellation Filter Sept. 2023 – Dec. 2023

- Designed and implemented an active noise cancellation filter prototype on Matlab, utilizing digital signal processing techniques to effectively reduce ambient noise showed through both frequency and time domain for both noisy and clean music.

Election Voting Sept. 2022 – Dec. 2022

- Developed a Java program from scratch to facilitate continuous voting in an in-state election, incorporating features to prevent double voting, enforce age restrictions, and verify voter addresses with a GUI.

Experience

Undergraduate Research Assistant, New York Tech - Manhattan, NY May 2024 – Present

- Conduct comprehensive literature review on hyperspectral imaging and sensors for early detection of plant stress.
- Collaborate on the plan of design and development of a software and hardware tool integrating IR sensors to monitor water index levels in plants with an automated feedback of an irrigation system.
- Enhancing system robustness by adapting hyperspectral imaging and AI-based drought detection to variable lighting and environmental conditions, enabling broader real-world deployment

Supplemental Instructor, New York Tech - Manhattan, NY Sept. 2024 – May 2025

- Lead weekly review sessions to clarify complex concepts like Fourier Transforms and system analysis for undergraduate students.
- Provide group academic support, helping students improve problem-solving skills and prepare for exams.

Leadership

Senator, NYIT Institute of Electrical and Electronics Engineer (IEEE) - Manhattan, NY Sept. 2023 - Jan. 2025

- Represent student interests as a senator, participating in meetings to discuss club initiatives, advocating for member needs, and contributing to decision-making and negotiating processes with NYIT student government.
- Lead organization events that meet the mission of our organization through arduino, game engine, circuit playground and unity software workshops and other trainings focused on skill development in the field of electronics.

Researcher, Undergraduate Research and Entrepreneurship Program (UREP) Oct. 2023 - May 2024

- Led a research group of 3 in detecting dental cavities through X-rays using advanced deep learning techniques like Convolutional Neural Network (CNN) with the intent of contributing to technological advancement in the field of medicine through machine learning (ML).

Mentor, Girls Learning Advanced Math (GLAM) May 2022 - Dec. 2024

- Provide leadership and guidance to young girls through mentoring programs, focusing on personal development, education, and life skill in the field of mathematics.