## **JULIETTE MANGON**

https://juliettemangon2.github.io/juliette/

(781) 628 8078 juliette.mangon@gmail.com

Boston, MA & New York City, NY linkedin.com/in/juliette-mangon

Ambitious Computer Science and Math major and Business of Entertainment, Media, and Technology minor at NYU. Seeking Summer 2025 internships in software engineering or tech-focused roles in media, entertainment, and business.

#### **EDUCATION**

# New York University, College of Arts & Sciences, New York City, NY

Sept 2023 – Dec 2025

B.A. Computer Science and Mathematics

**Course Work:** Algorithms, Operating Systems, Numerical Computing, Computer Systems Organization, Real Analysis, Numerical Analysis, Natural Language Processing, Discrete Structures, Theory of Probability, Topology

Stern School of Business, Steinhardt School of Culture, Education, Human Development, Tisch School of The Arts Minor in Business of Entertainment, Media, and Technology

**Course Work:** Entertainment and Media Industries, Globalization of the Entertainment Industry, Business Structure of the Music Industry, Business of Film, Business of Video Games

Syracuse University, College of Engineering & Computer Science, Syracuse, NY

Aug 2022 – May 2023

B.S. Computer Science and Mathematics

Course Work: Data Structures, Abstract Math, Linear Algebra, Calculus II, Elements of Computer Science

### TECHNICAL SKILLS

**Language & Frameworks** | Java, C++, C, Python, MATLAB, Javascript, HTML, Haskell, Assembly, BASIC **Services & Tools** | LaTex, Unix/Linux, Excel, Google Suite **Spoken Languages** | English, French, Spanish (Conversational)

### **DEGREE-RELATED WORK EXPERIENCE**

# **USA Mathematical Talent Search Grader | Art of Problem Solving**

Oct 2023 – Present

C++, Python, Excel, Mathematics

- Evaluating students' entries to the USA Math Talent Search Contest, marking progress and awarding points accordingly
- Analyzes math calculations, theories, and computational proofs and provides constructive criticism

## **Photoville Intern | Regenerating Inc**

May – Aug 2024

Python, SwiftUI, Figma

- Developed Photoville, an AI photo editing application for iOS using Python and SwiftUI
- Implemented facial recognition software from cv2, numpy, and dlib to create professional headshots
- Designed layout using Figma and conduct competitor and pricing analysis

#### **PROJECTS**

# **Plagiarism Detection Enhancement Project**

Oct 2024 – Present

Pvthon, MATLAB

- Designed and implemented a plagiarism detection system addressing the inaccuracies of existing tools by evaluating and refining methods from academic research
- Tested techniques such as N-gram classification, sentence similarity calculations, TF-IDF scores, and Word2Vec embeddings on a labeled dataset to identify the most accurate approach
- Developed a comparative evaluation function to measure and graph detected plagiarism against true values, in order to enhance detection precision using iterative improvements

## **Temperature Checker**

Dec 2023

C, LEDs, Microprocessors

- Created an object that detects body temperature using a motion sensor and thermal infrared camera
- Changing color LED light and LED screen used to display the temperature and color based on the range in which the temperature falls

# **Graph Theory and Enumeration Project**

Jan - May 2023

Mathematics

- Paired with a graduate mentor for a semester-long reading project with a focus on Graph Theory and Enumeration
- Presented findings to the other mentees and mentors as well as professors in the Mathematics Department