

# JULIETTE MANGON

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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

## TECHNICAL SKILLS

**Language & Frameworks** | Java, C++, C, Python, JavaScript, React, HTML, CSS, MATLAB, Assembly, BASIC

**Services & Tools** | Git, GitHub, Docker, LaTeX, Unix/Linux, Excel, Google Suite, Node.js, NPM, Vite

## 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

**Website Developer | Tryst Restaurant**

**Jan 2025 – Present**

*HTML, CSS, JavaScript*

- Redesigning and developing a fully coded website for Tryst, replacing Wix to improve performance, flexibility, and UX
- Implementing responsive UI/UX and SEO optimizations to enhance navigation, engagement, and visibility

**Photoville Intern | Regenerating Inc**

**May – Aug 2024**

*Python, SwiftUI, Figma*

- Developed an AI-powered iOS photo editing app, integrating facial recognition software from cv2, numpy, and dlib
- Designed UI in Figma and conducted competitor and pricing analysis

## PROJECTS

**Differential Geometry Online Resource**

**Present**

- Developing an online resource for Differential Geometry, modeled after well-known educational platforms like Paul's Online Math Notes
- Features structured explanations, proofs, and interactive visualizations to enhance learning

**Plagiarism Detection Enhancement Project**

**Dec 2024 – Jan 2025**

- Developed a plagiarism detection system, refining existing methods through NLP techniques like N-gram classification, TF-IDF, and Word2Vec
- Designed an evaluation function to enhance detection precision through data analysis and iterative improvements

**Ad Hoc Information Retrieval System**

**Oct – Nov 2024**

- Built a TF-IDF-based ranking system for 225 queries & 1,400 abstracts, integrating cosine similarity
- Designed and optimized a ranking algorithm, evaluating system performance with Mean Average Precision to improve semantic similarity matching and retrieval accuracy

**Temperature Checker**

**Dec 2023**

- Created an object that detects body temperature using a motion sensor and thermal infrared camera
- Implemented an LED display that changes color based on detected body temperature range

**Graph Theory and Enumeration Project**

**Jan – May 2023**

- 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