

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, MATLAB, Javascript, HTML, Haskell, Assembly, BASIC

Services & Tools | Git, Github, Docker, LaTeX, Unix/Linux, Excel, Google Suite

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