### **JULIETTE MANGON**

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#### **EDUCATION**

#### **New York University**

Sept 2022 - Dec 2025

B.A. Computer Science and Mathematics

• Coursework: Applied Internet Technology, Natural Language Processing, Algorithms, Computer Systems Organization, Numerical Computing, Real Analysis, Theory of Probability, Mathematical Statistics and Data Analysis

Minor in Business of Entertainment, Media, and Technology

• Coursework: Data Analysis in the Music Industry, Business Structure of the Music Industry, Business of Film, Entertainment and Media Industries, Globalization of the Entertainment Industry, Business of Video Games.

#### **TECHNICAL SKILLS**

Languages & Frameworks | Java, C++, C, Python, JavaScript, TypeScript, React, HTML, CSS, MATLAB, Assembly, R Tools & Platforms | AWS, Git, GitHub, Drizzle ORM, Unix/Linux, Excel, Google Suite, Figma, LaTeX, Docker, APIs WORK EXPERIENCE

### Freelance Web Developer

Feb 2025 - Present

React, Tailwind CSS, HTML, JS, Figma, Cloudflare

- Built and launched 7+ responsive websites for artists and creative professionals, tailoring UI design and functionality to each client's brand identity.
- Used Cloudflare Analytics and client feedback to iterate design, prioritizing UX to improve user engagement and usability.
- Managed the full product lifecycle from prototyping to deployment, ensuring reliable performance.

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

Oct 2023 – Present

C++, Python, Excel, Mathematics

- Evaluated 500+ Olympiad-level proofs per round, assessing complex reasoning and providing detailed feedback.
- Collaborated with other graders to refine rubrics and maintain scoring consistency across a national pool of submissions.

#### AI/ML Intern | Enlaye

**Jun – Aug 2025** 

Python, AWS, TypeScript, Ollama, Drizzle ORM

- Built and deployed end-to-end workflows that transformed field audio and images into structured issue reports integrated with Autodesk, Procore, and InEight, enabling 80% faster reporting across 1,000+ events.
- Developed a preprocessing pipeline to standardize and filter input data, improving LLM accuracy by 20% and reducing query latency by 35%.
- Collaborated with PMs to define success metrics and evaluate model performance, ensuring outputs aligned with real-world user needs and product goals.

# **Software Engineering Intern | Regenerating Inc**

May - Aug 2024

Python, SwiftUI, Figma

- Developed an AI photo-editing iOS application with a SwiftUI frontend and a Python facial-recognition backend.
- Implemented facial recognition using cv2, NumPy, and dlib to generate professional headshots.
- Prototyped layouts in Figma and conducted competitor and pricing analyses to refine design and market positioning.

#### **PROJECTS**

# Music Data Analytics and Insights Tool – Music Tech Mentee

Jun - Aug 2025

Python, Neo4j, Data modeling, HTML, JavaScript, Node.js

- Selected as 1 of 40 mentees from 500+ applicants for She is The Music's mentorship program; received direct product mentorship from a Google PM.
- Designed and built a metadata network integrating API endpoints from Spotify, MusicBrainz, Discogs, and SecondHandSongs to map collaboration patterns across the music industry.
- Developed an analytics and insights dashboard with an interactive visual network to explore artist, genre, and label relationships, supporting A&R discovery and data-driven decision-making.

#### **Essay Plagiarism Detection Project**

Dec 2024 - Jan 2025

Python, TF-IDF, Word2Vec, N-grams, Cosine similarity, scikit-learn, NumPy

- Developed a plagiarism detection system comparing n-gram features and similarity scores; presented findings in a departmental research showcase.
- Implemented multiprocessing to cut training time by 82% and achieved a 72.8% F-score across 1,400 academic papers.