JULIETTE MANGON

juliette.mangon@gmail.com | (781) 628 8078 | New York, NY

juliettemangon.com | github.com/juliettemangon2 | linkedin.com/in/juliette-mangon

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, R, Express.js
Tools & Platforms | AWS, Git, GitHub, Unix/Linux, Docker, REST APIs, MongoDB, SQL,Excel, Figma, Node.js

EXPERIENCE

Research Software Engineer | NeuGenes UCSF Lab **Oct 2025 – *Present***

React, Tailwind CSS, HTML, Express.js, MongoDB, API Design

- Developing an interactive platform to visualize neural and genetic data from deep-learning alignment models, integrating the model pipeline with a React/Express interface.

Freelance Web Developer **Feb 2025 – *Present***

React, Tailwind CSS, HTML, JavaScript, 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, SQL, 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+ field 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 refine product outputs to align with real-world user needs.

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, HTML, JavaScript, Next.js, Express.js, MongoDB, vis.js

- Selected as 1 of 40 mentees from 500+ applicants for She is The Music's mentorship program; received direct product mentorship from an industry PM.
- Built a web application integrating metadata from 4 APIs 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 helping teams identify suitable collaborators for upcoming projects.

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.
- Implemented multiprocessing to cut training time by 82% and achieved a 72.8% F-score across 1,400 academic papers.
- Presented findings in a departmental research showcase.