Mara Dominguez

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EDUCATION

Columbia University   **Sept 2021-May 2025**
BA Computer Science   *New York, NY*
- 3.75 GPA
- Dean's list 2021-2023
- Full Stack Developer for Columbia University Lion Dance Club

Riverdale Country School   **Sept 2017-June 2021**
High School
- Full 4 year Computer Science Curriculum
- Relevant Coursework: Data Structures and Machine Learning, Web Design (LAMP architecture), Computer Graphics

Work/Project Experience

NLP Research Project   **May 2023 - Aug 2023**
Research Assistant   *New York, NY*
- Columbia University Department of Engineering research project to find a link between Temperature and Crime
- Analyzed data from Facebook & Reddit converted it from ndjson to ORC format, and then analyzed the sentiment with BART
- Participated in weekly meetings and worked collaboratively with other Research Assistants on above projects.

CULD-Hub   **May 2023 – Present**
Full Stack Developer   *New York, NY*
- Managed, maintained, and updated a website designed to streamline and manage Lion Dance Club performance Affairs, coded in TypeScript and Django with a postgreSQL database
- Maintained club website (culiondance.org) with Bootstrap

Relevant Coursework

Operating Systems I   **Sept 2023-Dec 2023**
- Learned about Operating Systems Theory & Practice within the context of the linux kernel
  - The Process Abstraction, Scheduling
  - Memory Mapping and Virtual Addressing
  - Filesystems
- Found lines in the Kernel Code where important kernel processes were happening
- Wrote scheduling class, shadow page table trace, and syscall trace, and simple filesystem kernel patches with a team

Computer Networks I   **Sept 2023-Dec 2023**
- Learned Principles of Computer Networks
  - Anatomy of fundmmental protocols, such as CDN, TCP, UDP, HTTP, Routing algorithms, SDN, network load balancing protocols, etc.
- Wrote Reliable Data Transfer Chat App over UDP in C
- Wrote implementation of Bellman Ford Algorithm and the Go-Back-N Protocol over UDP in Rust

SKILLS & INTERESTS

- **Skills:** C, Rust, C++, Java, TypeScript, Python, Git, Django, Pandas, Pyarrow, LaTeX, Fluent in Spanish, Basic Mandarin, Prometheus, Elastic APM, LAMP,

- **Interests :** Knitting, Jazz Piano, Saxophone, and Guitar, Lion Dance, Foreign Movies, The Legend of Zelda