Dana Pantoja-Campa

(321) 310-6989 | dpp9951@nyu.edu | https://www.linkedin.com/in/danapantoja/

EDUCATION

New York University New York, NY
Bachelor of Arts in Computer Science and Mathematics, GPA: 3.82 Expected May 2027

- **Awards/Honors:** CAS Women in Science Scholarship, Hispanic Scholarship Fund Recipient
- **Relevant Coursework:** Data Structures, Algorithms, Linear Algebra, Calculus III, Discrete Math, Computer Systems Organization, Real Analysis, Probability and Statistics, Applied Internet Technology, Data Management and Analysis (In progress), Object-Oriented Programming (In progress), Numerical Analysis (In progress)
- **Clubs and Affiliations:** ColorStack, Rewriting the Code, CodePath, NYU Blockchain and Fintech

TECHNICAL SKILLS

Programming Languages: Java, Python, C, HTML/CSS, JavaScript, LaTeX
Libraries & Frameworks: NumPy, Pandas, Matplotlib, PyTorch, Node.js, Express, Mongoose, React
Tools & Software: Git, GitHub, Eclipse, Visual Studio, MongoDB

PROJECTS

Kalshi News - NYU Blockchain and Fintech Club x Kalshi (JavaScript, Node.js, Express, MongoDB)

- Built an automated news aggregation system that retrieves real-time market-moving news headlines and related events, and displays them through a full-stack interface.
- Implemented RESTful endpoints, database models, and scheduled background updates.

Song Stream - Social Media Application (HTML/CSS, JavaScript, Node.js, Express, MongoDB, Vue.js)

- Developed a full-stack social platform enabling users to post, caption, comment on songs, customize profiles, and explore content feed.
- Designed backend APIs, authentication logic, and a responsive Vue.js frontend.

Neural Network from Scratch (Python, NumPy)

- Implemented a fully connected feedforward neural network to classify the Iris dataset (150 samples, 3 classes) with **over 95% training accuracy**, using custom backpropagation and gradient descent without ML libraries.
- Demonstrated foundational ML understanding with custom implementation of activation functions, vectorized operations, and multi-layer architecture.

EXPERIENCE

NYU Courant Institute of Mathematical Sciences New York, NY
Research Assistant Jan 2026 – Present

- Developing an interactive web server using PyShiny that visualizes interpretable neural network predictions for RNA splicing, helping researchers understand how sequence and structural features influence isoform selection.

Computer Science Tutor Sep 2025 – Dec 2025

- Tutored students in CSCI-UA.003: Introduction to Computer Programming (Python), reinforced problem-solving skills and fundamental concepts.
- Maintained and updated the course website with lecture materials and examples.

Mathematics Grader Sep 2025 – Dec 2025

- Graded assignments for 80+ students in CORE-UA.110: Great Ideas in Mathematics, ensuring accuracy and fairness in assessment.

University of Washington Bothell Bothell, WA
Undergraduate Researcher Jun 2025 – Aug 2025

- Applied machine learning models for CT image reconstruction, demonstrating the ability to manage complex data, and contributing to algorithmic research in low-dose CT scan situations.
- Implemented and refined models using Python and PyTorch to enhance reconstruction accuracy.
- Worked collaboratively with the research team to add new features and optimize algorithms.

Outamation Remote
AI Automation Extern May 2025 – Jul 2025

- Built AI-driven document processing workflows using Python, NLP, and computer vision to extract and analyze unstructured data in finance and real estate.
- Implemented a RAG pipeline and evaluated AI models (LlamaIndex, Mistral 7B) to optimize automation efficiency for document classification and data extraction.

NYU Stern IT Department New York, NY
Student Admin Aide Jan 2025 – May 2025

- Managed supply orders and coordinated deliveries and returns to administrators using spreadsheets with set budgets.
- Addressed and resolved issues reported by students and professors through thorough communication and technological knowledge.

LEADERSHIP AND PROFESSIONAL DEVELOPMENT

Google X Basta Software Engineer Program Remote
Mentee Jun 2025 – Sep 2025

- Engaged in weekly 1:1 virtual sessions with a Google SWE for technical interview preparation.

Management Leadership for Tomorrow New York, NY
Career Preparation Fellow Mar 2025 – Present

- Accepted into a selective 18-month professional development program for high-achieving diverse talent.