Melody Nguyen

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PROFILE

AI/Software engineer with hands-on experience in Python automation, ML pipelines, and data-driven tools. Proven track record building scalable, reproducible systems at national labs and early-stage startups.

EDUCATION

Georgia Institute of Technology — Online
Masters of Science, Computer Science — *Expected Aug 2026*

Pace University, Seidenberg School of Computer Science and Information Systems — New York, NY
Bachelor of Arts, Computer Science | Minor: Business | Dean's List |GPA: 3.81 — *May 2026*

TECHNICAL SKILLS

Python, Java, SQL, R, C, JavaScript (React)

- **ML/AI:** Scikit-learn, NumPy, Pandas, SciPy, Matplotlib; **Systems:** HTML/CSS, JavaScript, React, Flask, APIs, Web Services
- **Software Engineering:** Agile, Scrum, Requirements, System Design, AWS (EC2, S3, IAM), DynamoDB
- **Tools:** Git, GitHub, Linux, Bash, Jupyter, Marimo, Tableau

PROFESSIONAL EXPERIENCE

Python & AI Instructor — Stanford, CA
iD Tech at Stanford University — *Expected Jun – Aug 2026*

Engineering Intern — Stanford, CA
Stanford Synchrotron Radiation Lightsource (SSRL) — *Jun– Aug 2025*

- Designed ML-based peak scanning and automated phase detection to improve experiment efficiency across high-temperature diffraction cycles, reducing manual analysis time across X-ray diffraction datasets.

Product Ambassador & Software Contributor — New York, NY
marimo.io — *Sep – Dec 2024*

- Developed interactive Python notebooks demonstrating reproducible scientific computing
- Contributed code, documentation, and UI/UX feedback to enhance platform interactivity
- Authored tutorials in Python data visualization, increasing adoption among researchers

Data Science Intern & Software Developer — Stanford, CA
SLAC National Accelerator Laboratory, U.S. Dept. of Energy — *Mar 2023 – Aug 2024*

- Analyzed 60+ photovoltaic datasets using Python, Pandas, and ML techniques; integrated NOAA + NREL data into automated pipelines for multi-state climate modeling
- Built visualizations and geospatial tools to support renewable grid resilience research
- Developed and maintained 5+ grid-simulation platforms (HTML/CSS, JavaScript, Jekyll)

PROJECTS & RESEARCH

Skill Sync — React, Scrum — Software Engineering Capstone — *2026*

- Built full-stack barter platform in a team of 4 using React and Firebase; led sprint planning, implemented client-side routing, and developed REST API endpoints for user matching logic.

Digital Pollution: Energy Costs of Large Language Models — Python, React — 2026

- Built interactive educational website visualizing LLM energy consumption and carbon impact across model sizes and inference workloads. Research published as Pace University Honors Thesis.

LEADERSHIP

President - Institute of Operations Research and Management Sciences — *Feb 2023 – Dec 2025*

- Built peer analytics community teaching Python, SQL, and data analysis to 300+ students; organized 14 workshops and speaker events with NYC tech professionals.

Marketing Lead, Google Developer Groups on Campus — *Jul 2025 – Present*

- Grew workshop attendance 200% through targeted outreach and engagement.

AWARDS & CERTIFICATES

Cornell Product Management | IBM 1st Place Agentic AI Hackathon | NSF Supercomputing Fellow | NVIDIA Deep Learning Pforzheimer Honors Scholar | United Nations Millennium Fellowship