Melody Nguyen

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PROFILE

Technical product manager with experience building data-driven and AI-enabled products. Background in Python automation, machine learning pipelines, and interactive analytics tools, with a strong foundation in algorithms and software engineering. Skilled at translating ambiguous user and business needs into clear product direction, metrics, and shipped systems in fast-moving research and startup environments.

TECHNICAL SKILLS

Python, SQL, R, Java; Scikit-learn, Pandas, NumPy, SciPy; experiment design, model evaluation, metrics definition; Tableau, Matplotlib; Git, GitHub, AWS, Jupyter, Linux; JavaScript, React, HTML/CSS, APIs; Data Structures, Algorithms, ML Pipelines, SDLC

PROFESSIONAL EXPERIENCE

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

- Built Python automation to streamline X-ray diffraction data collection across 130+ runs
- Developed ML-based peak detection models and scalable pipelines for high-volume scientific data
- Partnered with researchers to translate requirements into scalable, repeatable execution

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

- Built interactive Python notebooks to validate product workflows and explain model behavior to users
- Collaborated with engineers to incorporate user feedback into product improvements and UX refinements
- Authored technical tutorials that increased adoption and clarity for research teams

Data Science Intern — Stanford, CA
SLAC National Accelerator Laboratory, U.S. Dept. of Energy — *Jun 2024 – Aug 2024*

- Analyzed 60+ datasets to identify performance drivers and outcome variance across regions
- Integrated NOAA and NREL data into automated pipelines for multi-state climate modeling
- Built visualizations and geospatial tools to support renewable grid resilience research

Software & Web Developer — Stanford, CA
SLAC National Accelerator Laboratory, Applied Energy Division — *Mar 2023 – Jun 2024*

- Developed and maintained analytics-enabled platforms used by researchers and stakeholders
- Built dashboards to track usage, engagement, and system performance metrics
- Created documentation and onboarding workflows to reduce time-to-value for new users

PROJECTS & RESEARCH

Autonomous DIF Experimentation Logic — *2025*

- Designed automated scoring and ranking logic to prioritize high-value experimental outcomes
- Evaluated model decisions across repeated runs to improve efficiency and reliability

Extreme Weather + Solar Performance Modeling — Python — *2024*

- Merged NOAA + NREL datasets to quantify grid stress events
- Visualized cross-regional performance losses during heatwaves

EDUCATION

Pace University, Seidenberg School of Computer Science and Information Systems — New York, NY
Bachelor of Arts (BA) in Computer Science | **Minor**: Business | Dean's List |**GPA**: 3.8 — May 2026

- **Honors Thesis**: *Digital Pollution:* Understanding Energy Costs of Large Language Models
- **Relevant Coursework**: Artificial Intelligence, Software Engineering, Machine Learning, Data Science, Algorithms, Networks and Internet, Object-Oriented Programming

Cornell University, Product Management Certificate — New York, NY

- Product hypothesis development, personas, road mapping, prototyping, analytics, and execution — Feb 2026