

DANA SY-CHING

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RESEARCH EXPERIENCE

Graduate Researcher | Lab for Autonomous and Intelligent Robots, NYU (PI: Prof. Chris Clark) *Jan – May 2026*

- Designed a novel measurement approach for estimating task progress in bimanual robotic demonstrations, combining frozen DINOv2 visual representations with a causal transformer to predict time-to-completion where no standard benchmark existed
- Trained and evaluated ACT and OpenPI vision-language-action policies on robotic manipulation tasks in GPU-enabled HPC environments
- Built data processing pipelines for multimodal robot datasets, including episode segmentation, stream synchronization, and format conversion
- Evaluated large vision-language models (PaliGemma, Gemini) as high-level planners for embodied task reasoning

UX Researcher | ARISA Lab — Eclipse Soundscapes Citizen Science Project *Feb – Jun 2021*

- Identified stakeholder needs through interviews and persona development for a NASA-partnered citizen science project
- Prioritized accessibility by designing for blind and low-vision users first; conducted competitive analysis of information architecture across comparable citizen science platforms
- Translated research findings into accessibility requirements and interface recommendations for our team's functional React.js prototype

Usability Research Intern | NYU Usability Lab *Jun – Aug 2021*

- Planned and moderated 20+ user interviews and usability tests across 7 projects, building recruitment trackers and test scripts
- Synthesized qualitative and quantitative findings into client-facing visual reports identifying pain points and feature priorities

Research Assistant | NYU Tandon School of Engineering (Prof. Kit McDermott) *Jun – Sep 2021*

- Researched solar integration for soft-circuit wearables and authored a published 4-part tutorial sequence on solar-powered wearables for the IDM Wearables resource library (idmwearables.club), scaffolded from panel selection through testing to project integration

PROFESSIONAL & TEACHING EXPERIENCE

Web Publishing Specialist | New York University *Feb 2023 – Aug 2026*

- Led accessibility evaluation and user acceptance testing across 80+ WordPress plugins and themes against WCAG 2.0 AA standards, using VoiceOver, ARC Toolkit, and AXE DevTools, and delivered training in WordPress, accessibility, and usability
- Built Python/Pandas analysis pipelines assessing user affiliation across 70k+ users and 20k+ sites, informing a 35% reduction in Web Publishing sites in 2024
- Managed 3–5 students across service-improvement projects, including a hosting-vendor migration that reduced operational costs

Tech Teacher & Course Designer | Tech Unlimited *Jul 2022 – Aug 2025*

- Designed and led hands-on technical workshops using Universal Design for Learning (UDL) principles for neurodivergent learners, spanning creative coding, JavaScript, Python, 3D modeling, game design, micro:bit, and AI
- Contracted to author a reusable 5-lesson creative programming curriculum packaged for independent delivery by other instructors

STEM Instructor | NYU Center for K12 STEM Education *Jan – Jun 2021*

- Taught 30+ high school students in Arduino, creative coding, circuitry, and 3D modeling; adapted curriculum for remote delivery by introducing p5.js with original examples and assignments

EDUCATION

New York University | M.S. Mechatronics and Robotics, GPA 3.83 – *May 2026*

Reinforcement Learning, Medical Robotics, Mechatronics, Entrepreneurship

New York University | B.S. Integrated Design and Media, Summa Cum Laude, GPA 3.9 – *Dec 2021*

Nassau Community College | A.A.S. Information Technology, GPA 4.0 – *Dec 2019*

SELECTED PROJECTS

[Solar Secrets](#) — AI-supported AR learning experience on Snap Spectacles; learners reveal planetary facts through spatial interaction, with fresh content generated via LLM (MIT Reality Hack AWE 2026)

[Visuo-Tactile Sensor](#) — A 16×16 pliable tactile sensor array (velostat, mux, shift register, Arduino) with serial data visualization and calibrated sensitivity

SKILLS

Python (PyTorch, Pandas), LeRobot, ACT, OpenPI, DINOv2 | JavaScript, Arduino, NVIDIA Jetson, RaspberryPi, Git | Mixed-methods UX research, usability testing, WCAG 2.0 AA, VoiceOver, Figma, curriculum design