Shristhi Pant

New York City | 205.253.9394 | Portfolio: https://shris04.github.io/Portfolio/ | shristhi.pant@nyu.edu | LinkedIn

EDUCATION

New York University, Tandon School of Engineering, Brooklyn, NY — May 2026
B.S in Mechanical Engineering
Relevant Courses: Materials Science, Fluids, Measurement Systems, Disability Studies, Machine Design, Advanced CAD, Controls

SKILLS AND INTERESTS

Technical Skills: SolidWorks, Ansys FEA/FEM, Fusion 360, OnShape, MATLAB, Python, Cura, Overleaf, Roboflow
Design & Creative Skills: Figma, Adobe Photoshop, Adobe Premiere Pro, DaVinci Resolve, Photography, Videography
Languages: Fluent in English and Conversational in Nepali

EXPERIENCE

Denmark Technical University, Biophysics and Fluids Department — Lyngby, Denmark
Researcher — July 2025
- Conducted controlled micro-indentation wear tests and quantified tip degradation using MATLAB image processing.
- Analyzed wear mechanisms to inform the design of biomedical needles and micro-tools.

The NYU Ability Project, Joint Research with Tandon, Steinhardt, & Tisch — New York, NY
Undergraduate Research Assistant — February 2024 - May 2025
- Designed and fabricated assistive devices using 3D printing, textiles, and digital fabrication for visually impaired and neurodiverse users.
- Partnered with Brooklyn Botanical Garden, Helen Keller Center, and HeartShare to deploy and user-test accessibility tools.
- Developed open-source teaching materials adopted by 40+ students and staff.

United Prosthetics and Orthotics — Bessemer, Alabama
Shadow Intern — June 2023
- Assisted fabrication of patient-specific prosthetic components using CAD and 3D printing.
- Observed clinical fitting, gait evaluation, and socket design trade-offs to understand real-world constraints.

PROJECTS

Stroll Patrol Smart Walker, Senior Design — New York, NY
Researcher and Mechanical Designer — September 2025 - Current
- Designing an assistive walker with ergonomic handle geometry, adjustability, and health tracking.
- Applying design controls, risk analysis, component sourcing, and preliminary FMEA for safe deployment.

Flexible AI-Enabled Mechatronic Systems Lab — New York, NY
Mechanical Designer — August 2025 - Current
- Design and prototype soft robotic systems for surgical rehab and assistive tech using FEA, SolidWorks, and 3D printing.
- Created ergonomic hand-interface geometries for HCI applications.

Iron Man Suitcase, Advanced Computer-Aided Design — New York, NY
Mechanical Designer — September 2025 - December 2025
- Modeled a transforming mechanical suit using SolidWorks, including GD&T, tolerance analysis, and limb mechanisms.

Robotic Design Team — New York, NY
Mechanical Designer — September 2023 - May 2024
- Designed wheel and hub assemblies in OnShape for a terrain-adaptive excavation rover.
- Manufactured and assembled aluminum components; supported full-system integration.

Prosthetic Arm Development, Introduction to Engineering & Design — New York, NY
Project Leader — January 2023 - May 2023
- Led 3-person team to design Arduino-controlled prosthetic arm with motorized grasp/release using gears, sensors, and 3D-printed mechanisms.
- Developed circuit design, mechanical linkage system, and working prototype.

EXTRACURRICULAR

Nepali Student Association — New York, NY
Founder & President — January 2023 - Current
- Built 80+ member organization and organized 12+ events serving 600+ attendees.
- Managed budgeting, partnerships, and cross-university collaborations.

NYU Hackathon — New York, NY
Coordinator — September 2022 - May 2023
- Secured and negotiated $5,000 in funding and managed industry partnerships with brands like Celonis and Uizard.