

Danish Puri

☎ (646) 258-2346 | ✉ dp3858@nyu.edu | New York, NY

EDUCATION

New York University, Tandon School of Engineering

B.S. in Computer Engineering

Brooklyn, NY

Expected May 2027

EXPERIENCE

Global College of Technology

Machine Learning Engineer Intern

Kathmandu, Nepal

May 2025 – Present

- Developed end-to-end Python data pipelines for real-time vehicle and license plate detection using YOLOv11 (PyTorch), achieving high-accuracy results across diverse CCTV datasets
- Fine-tuned a YOLOv11n model for license plate detection and integrated a DeepSORT + ByteTrack hybrid tracking pipeline to stabilize vehicle detection through occlusion
- Integrated OCR (EasyOCR) with Devanagari/Latin script support and a SQLite backend for automated logging, enabling robust data processing and model evaluation

NYU Self Drive, AI4CE Lab

Autonomous Navigation Team Member — EarthRover Challenge 3

New York, NY

Spring 2025

- Contributed to NYU Self Drive's global deployment for FrodoBots' EarthRover Challenge 3, transitioning the navigation stack from controlled indoor testing to live, unsupervised international missions
- Supported mission execution across global test sites (Nairobi, Lagos, Panama, Costa Rica, Gaborone, Port Louis) under Prof. Chen Feng and the NYU AI4CE Lab, in partnership with FrodoBots Lab

NYU Processor Design (VIP Team)

Hardware Design Contributor

New York, NY

[Add semester/dates]

- Contributed Verilog RTL code toward the team's RISC-V-compatible processor core, part of a Vertically Integrated Project (VIP) spanning design, verification, and synthesis
- Collaborated with a multidisciplinary hardware team following an RTL-to-silicon workflow, from RTL design through verification, synthesis, and layout

National Innovation Center

Aviation Systems Engineering Intern

Kirtipur, Nepal

Dec 2023 – Feb 2024

- Engineered autonomous flight control software for medical-delivery drones in Python and Mission Planner, improving delivery accuracy by 25%
- Collaborated with aerospace and hardware teams to integrate ArduPilot navigation and telemetry systems across multiple UAV prototypes
- Performed system validation, flight testing, and documentation using QGroundControl and MATLAB, achieving 100% mission reliability

PROJECTS

Hands-Free Human-Following Robot | *Arduino, Raspberry Pi, CAD, Ultrasonic Sensors* Sep 2024 – Dec 2024

- Designed and built a robot that autonomously follows a user and carries items, developed as part of the EG-1004 RAD Project
- Programmed Arduino and Raspberry Pi controllers with ultrasonic sensors for user tracking and modeled the chassis in CAD

TECHNICAL SKILLS

Languages: Python, C++, SQL, Verilog

Tools & Frameworks: PyTorch, TensorFlow, NumPy, Pandas, Mission Planner, ArduPilot, MATLAB, Git

Spoken Languages: English (fluent), Nepali (fluent), Hindi (fluent), Spanish (conversational)

HONORS & AWARDS

2026 MCM/ICM — Successful Participant, Problem A

2026

- The Pulse of Power: A Continuous-Time Thevenin Model for Smartphone Battery Dynamics*

Copyright Registration, Copyright Registrar's Office of Nepal — *Gateway to Number Theory* (B-0052)

2024

1st Place, National Rank, IMMC Mathematical Modeling — Nepal National Math Team

2022

Top 10, Qualifier, International Mathematics Olympiad (IMO)

2022