

Nishant S. Aswani

PH.D. STUDENT IN COMPUTER SCIENCE

☎ (+971) 50-106-5724 | ✉ nishantaswani@nyu.edu | 🏠 nishantaswani.com | 📷 niniack | 🌐 nishantaswani

Education

New York University

DOCTORAL (PH.D.) STUDENT IN COMPUTER SCIENCE

New York and Abu Dhabi

Sep. 2021 - May 2025

- Relevant Courses: Algorithmic Machine Learning & Data Science | Embedded Systems | Multiprocessor Programming | Embedded Systems

New York University Abu Dhabi (NYUAD)

B.SC. IN COMPUTER ENGINEERING | GPA: 3.886

Abu Dhabi, UAE

Aug. 2017 - May 2021

- Relevant Courses: Object-Oriented Programming | Data Structures & Algorithms | Machine Learning | Directed Study on Recommender Systems | Engineering Ethics | Open Source Software Development

Experience

The eBRAIN Lab, NYU Abu Dhabi

GRADUATE RESEARCH ASSISTANT

New York and Abu Dhabi

Sep. 2021 - Present

- Researching Continual Learning

Picogrid

MACHINE LEARNING INTERN

Remote

July 2021 - Aug. 2021

- Architected a pipeline to to annotate, train, and deploy a custom computer vision model for the purposes of monitoring and protecting an endangered desert species, cutting ML-related costs by 95%.
- Rapidly refactored a portion of the existing code base to integrate the custom ML solution for deployment in production, executing tests in parallel to ensure continuity in the end-user experience.

The SPACE Initiative, NYU Abu Dhabi

2021 TEAM LEAD & 2022 STUDENT ADVISOR

Abu Dhabi, UAE

June 2020 - Present

- Led a team of students under a US Embassy grant of 100K USD to build the foundation for a rocketry team at NYUAD under the 'Support & Preparation for Aerospace Competitions in the Emirates' (SPACE) initiative.
- Designed and oversaw manufacturing of an ARM processor based PCB outfitted with relevant avionics peripherals (GPS, orientation sensors, power management, memory, etc).
- Developed a scheduler-based, flight software for the custom PCB to communicate with sensors, execute flight decisions, and down-link telemetry data with the ground station module.

Scanify

SOFTWARE ENGINEERING INTERN

New York, USA

Feb. 2020 - Aug. 2020

- Investigated and implemented a popular computer vision model to automate a manual task in the end user interface, improving customer satisfaction
- Constructed a custom data pipeline allowing images to be seamlessly annotated, stored in cloud storage, and accessed for model training

Composite Materials and Mechanics Laboratory, NYU Tandon

STUDENT RESEARCH ENGINEER

New York, USA

Jun. 2019 - Nov. 2019

- Co-developed a Python software that verifies the authenticity of CAD and tessellated digital models, capable of detecting tampering with model geometry
- Designed the first-round challenges for NYU CSAW's 2019 Hack3D competition involving elements of file forensics, 3D graphics programming, and reverse engineering, for 15+ participating teams
- Collaborated with NYU CSAW 2019 and the National Science Foundation (NSF) to develop a final round challenge for 5 finalist teams, with prizes up to 1K USD

Skills

Engineering

Machine Learning Deployment, Embedded Systems, Project Planning, Linux-based Architectures, Object-Oriented Design, scikit-learn, PyTorch, Git, Docker, AWS Lambda & S3, GCP Compute & Storage, Jupyter, Numpy, Pandas, OpenMP, Django

Computing Languages

C++, Python, Java

Human Languages

English (Native), Mandarin (Fluent), Hindi (Fluent)