# Yaman Garg

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### **EDUCATION**

### New York University Abu Dhabi (NYUAD), Abu Dhabi, UAE

Bachelor of Science in Civil Engineering with Minor in Urbanization | GPA: 3.99

Relevant Coursework: Sustainable Cities, Introduction to Urban Planning, Affordable Housing, Living Cities, Global Connections: Shanghai, Design and Innovation, Applied Optimization, Environmental Engineering, Traffic & Transportation Engineering, Structural Components Analysis, Structural Systems

### PROJECTS

Multi-Robot Construction System - Capstone Design Project, NYUAD, Abu Dhabi, UAE

- Project Team Member January 2021 – Present Designing a multi-robot construction system to build generic construction elements such as walls using interlocking blocks with a team of 3 students as part of engineering capstone project.
- International Genetically Engineered Machine (iGEM), NYUAD, Abu Dhabi, UAE

Engineering Team Lead

- Won a gold medal in 2020 iGEM competition as a multidisciplinary team of 10+ students with research on rapid diagnostic device for detection of fungi responsible for amphibian decline.
- Leading a team of 5 engineering students and actively assisting in engineering design-cycle based research work, design, prototyping and testing of device components for 2021 iGEM, details here.

### COOLPARK, NYUAD, Abu Dhabi, UAE

- Project Team Member Engineers for Social Impact
- Researched key concepts and designed a passively cooled outdoor public space to tackle urban heat island effect in Abu Dhabi. Participated in Cool Abu Dhabi Challenge and James Dyson Award, details here. Robotario, NYU Shanghai (NYUSH), Shanghai, China

Project Team Member

- September 2019 December 2019 Designed, programmed, and fabricated an artificial ecosystem of 12 mini sentient robots in a team of 4 students under the supervision of Interactive Media Arts Prof. Rodolfo Cossovich.
- Won the best presentation in 3rd International Conference on Robot Systems and Applications held in ٠ Chengdu, China 2020. Exhibited in West Bund Museum, Shanghai. See publication here.

### **WORK & ACADEMIC EXPERIENCE**

### NYUAD Engineering Division, NYUAD, Abu Dhabi, UAE

Undergraduate Teaching Assistant

Setting marking schemes for evaluations, conducting grading, and providing feedback to students for the 2000 level engineering courses "Conservation Laws in Engineering" and "Engineering Dynamics".

# NYUAD Engineering Division, NYUAD, Abu Dhabi, UAE

Student Research Assistant – Transportation Engineering

- Assisted in research to capture the temporal aspects of traffic congestion through data analysis.
- Performed literature review on the Macroscopic Fundamental Diagram (MFD) and used loop detector • datasets to plot MFDs in order to gain insights about the temporal aspects of the diagram.

## LEADERSHIP & COMMUNITY INVOLVEMENT

### American Society of Civil Engineers (ASCE) Student Chapter at NYUAD

Vice President

- Establishing collaborations with external partners such as Abu Dhabi Department of Transport and • Municipalities (DMT) and CITIES research center to organize lectures, events, and competitions.
- Created detailed semester budgets to acquire funding for the newly established student chapter. •

### NYUAD Office of Student Life

First Year Dialogue (FYD) Peer Facilitator for class of 2024

Engaging my FYD group of 10 first-year students in constructive dialogue sessions on topics essential to college transition such as identity, self-care, financial literacy, and time-management.

# Women in STEM (WeSTEM) High School Conference at NYUAD, Abu Dhabi, UAE

**Operations** Team Member

- October 2018 Present
- Helping spark interest of female and non-binary identifying high school students in STEM fields by supporting the operations and facilitating the logistics of the annual one-day conference.

### SKILLS

Languages: Hindi, Native Fluency; English, Fluent; Punjabi, Intermediate; Chinese: Beginner(Conversational) Software: C++, Python, Pandas, MATLAB, Simulink, AIMSUN, Arduino, Onshape(CAD), AutoCAD, MSVisio, Google Earth Engine, QGIS, RSMeans, Eagle, HTML, CSS, JS, Illustrator, Photoshop, Premiere

February 2020 – Present

May 2020 - Present

February 2020 – May 2020

February 2020 – Present

April 2020 – August 2020

October 2020 – Present

Expected May 2022