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Education

New York University Abu Dhabi (NYUAD)

BS Civil Engineering with minor in Urbanization GPA: 3.99/4

Study abroad semesters at NYU Tandon School of Engineering (Fall 2021) and NYU Shanghai (Fall 2019)

Work Experience

e.construct Fz LLC

Structural Engineering and Research Intern

- Created a user guide for the Substructure Optimization Tool developed by the firm through running multiple test projects. Also compiled a bug-sheet for the developers to address in the software.
- Optimized FDM and Resin 3-D printers and printed structural models of multiple Expo 2020 projects.
- Assisted in the structural design of a high rise building project by performing built-up area and slab volume calculations and conducting verification of slab and beam design in ETABS.

CITIES Center for Interacting Urban Networks

Student Research Assistant

• Planned a comprehensive waste-to-energy system in a multidisciplinary team for the Swiss-Middle East Circular Economy for Youth Initiative, to be presented at Expo 2020 Dubai, details here.

NYUAD Engineering Division

Undergraduate Teaching Assistant

• Verified marking schemes and conducted quiz/examination grading for the 2000 level engineering courses "Conservation Laws in Engineering" and "Engineering Dynamics".

Projects

ASCE Concrete Canoe Competition 2022 Hull Designer

NYU Tandon School of Engineering, NY, USA Sep 2021 | Dec 2021

Designed the hull of the NYU team's concrete canoe using DELFTship maritime modeling and stability analysis software. Design was based on optimization of primary and secondary canoe stability parameters.

Smart City Robotics (SciRoc) Challenge 2021

S.M.A.R.T. Team Member

Won the category gold medal as a team by programming a coffeeshop server robot utilizing autonomous navigation, speech recognition, and deep learning-based object detection, details here.

Autonomous Robotic Construction System – Capstone Project Project Team Member

Designing, programming, and simulating an autonomous robotic construction system in a team of 3 students to build a wall using dry-stack interlocking blocks as a proof of concept for large scale applications.

International Genetically Engineered Machine (iGEM) 2020 Engineering Team Lead

Jan 2020 | Feb 2021 Won a gold medal in the 2020 iGEM competition as a multidisciplinary team of 10+ students with research on a rapid diagnostic device for detection of fungi responsible for amphibian decline, details here.

LEADERSHIP AND COMMUNITY INVOLVEMENT

American Society of Civil Engineers (ASCE) Student Chapter at NYUAD Abu Dhabi, UAE Sep 2020 | Present President for 2021-2022, Vice President for Spring 2021, Treasurer for Fall 2020

- Leading the chapter e-board to organize lectures, visits, and competitions promoting Civil Engineering.
- Establishing collaborations with partners such as Abu Dhabi Deptt. of Transport and CITIES Center.

NYUAD Office of Student Life

First-Year Dialogue (FYD) Peer Facilitator for the Class of 2024

• Facilitated dialogue sessions on topics essential to college transition such as identity, self-care, financial literacy, and time-management and conducted group/1:1 check-ins in my FYD group of 10 first-years.

SKILLS

English (Fluent), Hindi (Native), Chinese (Beginner, Conversational) Languages: AutoCAD, Revit, Dynamo, ETABS, SAP2000, ANSYS, GeoStudio, HydroCAD, MS Project Software: Navisworks Manage, AIMSUN, Python, C++, Pandas, QGIS, Google Earth Engine, Adobe Suite

Bologna, Italy (Remote)

May 2021 | Sep 2021

Boston, MA, USA (Remote)

Abu Dhabi, UAE

Jan 2021 | Present

Abu Dhabi, UAE May 2020 | May 2021

Dubai, UAE May 2021 | July 2021

Abu Dhabi, UAE Feb 2021 | Sep 2021

Abu Dhabi, UAE

Oct 2020 | May 2021

Abu Dhabi, UAE

Aug 2018 | May 2022