

DANIELLA KATA

dmkata@buffalo.edu; (631) 974-7662; <https://www.linkedin.com/in/daniella-kata/>

EDUCATION

Bachelor of Science, Civil Engineering
University at Buffalo, The State University of New York
Honors College Scholar, Dean's List: 2020, 2021, 2022

Anticipated May 2024
GPA: 3.95/4.0

SKILLS

Technical Skills: Microsoft Excel, MATLAB, AutoCAD Civil 3D, SAP2000, Revit, LARSA 4D, MicroStation
Language Skills: proficient in German

ENGINEERING PROJECTS

Steel Bridge, ASCE

September 2020-present

- Led a team of 10 students to design, analyze, and fabricate a steel bridge based on a set of specifications.
- Utilized AutoCAD and SAP2000 to test load cases and perform analysis on potential bridge designs.
- Used leadership skills to act as co-project manager for the duration of the 2023-2024 project.
- Produced a bridge at the minimum cost and fastest speed that could withstand horizontal and vertical load tests.

Technical Water Treatment Design and Research Project

April 2021

- Investigated water filter alternatives for areas of the world with limited water access.
- Produced a technical paper with feasible solutions based upon research of given areas and materials.

Wind Turbine Design Project

September-November, 2020

- Participated on a team of 4 students to test factors and create a small wind turbine with maximum power output resulting in a turbine design that produced 8.03 Watt seconds.

Erhu (Chinese violin) Design and Build Project

January-May, 2017

- Created sketches for an erhu based on measurements and ratios from another erhu.
- Built the erhu from scrap wood producing an instrument with excellent sound quality and aesthetic.

WORK EXPERIENCE

Student Assistant for Various Subjects

Small Groups Math, Chemistry, and Physics Student Assistant

September 2021-present

- Assisted in instructing groups of twenty college freshman engineering students in supplementary calculus, chemistry, and physics using outlines created by an instructor resulting in students improving exam scores compared to previous years.

Mechanics of Solids Student Assistant

September 2022-present

- Enhanced college sophomores' and juniors' understandings of concepts such as beam deflections, angle of twist, shear force and bending moment diagrams in Mechanics of Solids.
- Guided students through homework and in-class practice problems and answered students' questions.

Intern at WSP USA

June 2023-present

- Organized plan sets, performed water pipe size calculations, compiled Storm Water Pollution Prevention Plan reports.
- Utilized AutoCAD Civil 3D and MicroStation to design bollard details for a site.

AWARDS

UB ASCE Steel Bridge 3rd Place nationally

June 2023

- Received 1st Place regionally.
- Received 2nd Place in Construction Time and 6th Place in Lightness nationally.

2022 Grace W. Capen Academic Award

May 2022

- Received this award based upon maintaining a GPA of at least 3.95.

ACTIVITIES/LEADERSHIP

Instructor for Holy Cross Middle School STEM Camp in South Africa

January, 2023

- Taught 4th through 7th graders about different connections, gusset plates, types of bridges, and strength of materials.
- Guided students in designing and building a 1 to 2 foot structure that could withstand shaking from a small makeshift earthquake simulator.

American Society of Civil Engineers UB Chapter President

May 2022-present

- Led General Body and Executive Board meetings.
- Coordinated club events such as networking with professionals, resume building workshops, and social events.