Usanbolor Amartuvshin

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EDUCATION

Cornell University, College of Engineering, Ithaca, NY
Bachelor of Science: Mechanical Engineering **GPA: 3.6** **Expected May 2027**

Relevant Coursework: Statics and Mechanics of Solids • Thermodynamics • Python • Dynamics • Mechanical Design Synthesis • Waves • System Dynamics • Materials • Fluid Mechanics

TECHNICAL SKILLS

- CAD & Design: FEA, AutoCAD, Fusion360, Onshape
- Manufacturing: Composites, Mill and Lathe, Laser Cutter, 3D Printer
- Electronics & Systems: Altium, Basic Python
- Language: Mongolian (fluent); English (fluent)

ENGINEERING EXPERIENCE

Ergonomics Subteam member, Cornell Formula SAE Project Team, Ithaca NY **Feb. 2024 - Present**

- Lead design, manufacture and testing of the steering system for electrical formula style race cars, integrating ergonomics, safety and driver performance.
- Designed and built custom electrically integrated steering wheel with CAD designed free form grips, 3 point bend tested improving driver comfort and durability under race conditions
- Collaborate with other subteams for seamless integration and fit for the parts.

ZT Research Group, *Undergraduate researcher*, Ithaca NY **May. 2025 – Present**

- Develop thermal interface materials (TIMs) using different fabrication methods.
- Conduct background research on suitable materials, propose manufacturing approaches for the TIMs, fabricate samples in the lab, and perform tests to evaluate their performance.

Society of Women Engineers,, *Member*, Cornell University **Sep. 2023 - Present**

- Planning events for Junior Girl Scout troops, working with coordinators of GS, coordinating the activities and volunteers as a committee member

Robotics, *co-lead of the girls team,* Chicago IL **Sep. 2019 – May 2023**

- Designed and built robots with different functions based on the yearly challenges through VEX competition
- Mentored new members in mechanical design, CAD, and robotics fundamentals."

RELEVANT PROJECTS

Mentee, ACE, Chicago, IL **Sep. 2022 – May 2023**

- Collaborated with professional engineers on the Lindblom project, focusing on mechanical systems.
- Obtaining and learning skills from professionals in engineering fields, with focus on mechanical systems within the buildings.

Engineering Design Class **Spring 2023**

- Worked on the passion project "Flip Up" (Vestaboard) with the goal of replacing the Marquee sign commonly used by Theatres and Hotels with a safer upgraded design that still keeps the aesthetic feel of the structure of marquee sign
- Created and Designed multiple small projects that utilized softwares such as On-shape, Fusion 360, laser cutter, 3D printer etc.

ACTIVITIES/INTERESTS

Between the Pages • Crocheting • Running • Morin Khuur (Mongolian traditional instrument)