

# Darren Biskup

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## EDUCATION

### University of Illinois, Urbana-Champaign

GPA: 3.86/4.00

*B.S. Mechanical Engineering, Minor in Computer Science*

*May 2023*

- *James Scholar Honors Program*
- *American Society of Mechanical Engineers*

## EXPERIENCE

### Lucid Motors

MAY 2021 - AUGUST 2021

*Mechanical Engineering Intern, High Voltage Battery*

- Worked as part of the High Voltage Battery Team and produced an improved design for the high voltage chain reducing the number of bolts required to join busbars by 50% per battery pack
- Design change saves company upwards of \$375,000 in raw material costs, and upwards of \$700,000 in labor costs (per 7000 units)
- Devised an improved method of measuring resistance of busbar joints that increased accuracy by over 50% at low voltages.
- Planned, conducted, and interpreted stress tests on bolted busbar joints to analyze how joint design performs at EOL
- Collected and analyzed data on heat generation, and used this data to calculate theoretical horsepower and efficiency loss of specific joints
- Presented weekly on findings to the High Voltage Battery Team and made a final presentation to the director of the Lucid Motors Battery department

### Eco Illini Supermileage

JAN 2021 - PRESENT

*Battery Subteam Lead*

- Spring 2021: Worked with the Mechanical Subteam to harness the battery pack of the G5E electric vehicle securely to the firewall.
- Fall 2021: As Battery Subteam Lead, I am leading a full redesign of the battery pack to compete in the upcoming Shell Eco-marathon.

### Assistant Tennis Coach, Los Altos Recreation Center

JULY 2018 - MARCH 2020

- Taught beginner tennis lessons to a class of 8-12 students with Coach Francois Chan.

## SKILLS

**Computer Programming:** Java, Kotlin, and Python. Self-taught HTML and CSS

**Computer Aided Design:** Autodesk Fusion360, Solidworks

**Languages:** Mandarin (fluent), Japanese (intermediate)

## RELEVANT COURSEWORK

- Computer Science I (Kotlin), Physics Mechanics/E&M, Electric/Electronic Circuits, Differential Equations, Linear Algebra with Computational Application, Statics, Design for Manufacturability, Dynamics, Thermodynamics

## PROJECTS

### Magic Hanger

- Devised a unique clothes hanger which assists people with disabilities at the Georgia Tech Industrial Design Summer program 2018. Constructed working polyurethane foam prototypes and also created CAD models using Fusion360.

### Subwoofer Restoration

- Used power tools to grind and replace a pair of worn subwoofer cones, then used tuning software to attach the precise amount of mass to the speaker cones to resonate with the passive radiator.