GRIFFIN RZONCA

grzonca2@illinois.edu ⋄ 815-409-0918 ⋄ Romeoville, IL

EDUCATION

University of Illinois at Urbana-Champaign **Expected Graduation:** May 2024
B.S. Electrical Engineering, *Grainger College of Engineering* **GPA:** 3.70 / 4.00
Minor: Hoeft Technology and Management Program

WORK EXPERIENCE

Undergrad Researcher *January 2022 - Present*
Thin Film and Charged Particle Laboratory

- Investigating a spray deposition process for perovskite solar cells that will drive down energy costs and reduce manufacturing times by 80-85%
- Tested various solvent combinations and deposition conditions for perovskite, ETL, and HTL layers, improving crystal lifespan from initial tests by 200%
- Compiled SEM and XRD data in weekly reports to lab group leaders
- Organized monthly research group outings to foster interdisciplinary collaboration, connect coworkers, and exchange ideas in a welcoming environment

Laboratory Assistant *August 2021 - Present*
Grainger Center for Electric Machinery and Electromechanics (CEME)

- Collaborated with a team of 6 to create a PCB to monitor outputs of a 60-panel solar array
- Redesigned an ECE 431 lab activity with a PHD student, modernizing stepper motor hardware, creating Arduino control code, and rewriting the lab manual to be more efficient and accessible
- Overhauled organization system for the Grainger CEME website, archiving 20+ years of seminars, and re-designing UI using WordPress to improve site functionality

Course Assistant - ECE 110 *January 2021 - May 2021*
University of Illinois at Urbana-Champaign

- Moderated a lecture section for ECE 110 - "Introduction to Electronics" with a Professor, responding to questions during lecture of 150+ students
- Advised 30+ undergrads when needed and gave live demonstrations of how to build analog circuits such as weather sensors, Schmitt-trigger oscillators, and light-seeking robotic cars

LEADERSHIP EXPERIENCE

RSO President *April 2021 - May 2022*
Institute for Scientific Progress, Innovation, Research, and Education

- Managed a student organization of 16 to oversee construction of an outdoor table with a solar system mounted overhead, allowing UIUC students to charge their devices with clean, free energy
- Competed against 59 teams in solar design competition: modeled PV system size and equipment, ran distribution impact analysis, created financial models, and proposed the design to the National Renewable Energy Laboratory, advancing to round 3 of 4 total rounds

AWARDS AND CERTIFICATIONS

Grainger CEME Undergraduate Research and Leadership Award *May 2021*

- Awarded to 3 students per year who demonstrate excellence in the field of Power and Energy

Solar Executive MBA *Jan 2021*

- 6-week NREL-sponsored course on financial modeling and cost-benefit analysis of energy projects, including training on various industry documents such as PPAs, EPCs, and O&M contracts

Grainger Engineering James Scholar *August 2020*

- Distinction made for the top 20 percent of each UIUC engineering class

SKILLS AND INTERESTS

Programming Languages: Python, C, SystemVerilog, MATLAB, Arduino, OpenDSS
Skills: Power Electronics, Solar Energy, Microsoft Excel, Project Management, AuroraSolar, SEM Imaging
Interests: NBA basketball, *Interstellar,* Indie and Alternative Music, and Hiking