Eric Nieto Gonzalez

Email: nietoeric1@gmail.com || **LinkedIn:** www.linkedin.com/in/ericnietogonzalez || **Phone Number:** 312-978-1993

Objective:

To contribute to the design, testing, and optimization of advanced circuitry within the field of nanotechnology.

Education:

University of Illinois at Urbana-Champaign

Grainger College of Engineering

- B.S. in Electrical Engineering — August, 2020 → May, 2025
  - GPA: 3.55 / 4.0
- M.S. in Electrical Engineering — Expected Graduation: May, 2027
  - Thesis: Nanotechnology
  - GPA: 4.0 / 4.0

Work Experience:

Research Intern at Sandia National Laboratories — May, 2025 → August, 2025

- Nanoscribe and 2PP
- Words here
- Words here

Soft Robotics Research Assistant at the University of Illinois Urbana-Champaign — January, 2024 → May, 2025

- Created a microgripper that can be inserted inside the human body for procedures and studies
- Applied 2.5D Topology optimization to create the most efficient gripper with the least amount of material
- Developed alternate innovative medical microtools to enhance versatility in applications

Manufacturing Engineering Intern at G&W Electric Co. — May, 2024 → August, 2024

- Designed and implemented custom tools to solve production challenges to enhance manufacturing
- Proficient in industry engineering documentation, including product and electrical circuit schematics
- Coordinated with employees across all specialties to foster a safer and more positive environment

---

Leadership Roles:

Academic Redshirts in Science & Engineering (ARISE) Student Board Member — January, 2023 → Present

- Cooperated effectively with program coordinators to resolve concerns and execute program enhancements
- Mentored younger students to guide their academic journey and improve their performance
- Organized and led social events to foster networking opportunities tailored to ARISE students

Society of Hispanic Professional Engineers (SHPE) — January, 2022 → Present

- Planned and hosted social events for undergraduates within engineering to create connections
- Communicated details of all social events thoroughly to all target groups in an effective manner

---

Projects:

Created a Smart Snack Dispenser with ESP32 — February, 2025 → May, 2025

- Words here
- Words here
- Words here

Integrated Circuit Wafer Fabrication and Testing — August, 2024 → December, 2024

- Fabricated semiconductor devices using photolithography, diffusion, and etching techniques
- Developed cleanroom skills to produce functioning MOS transistors and diodes
- Conducted device testing to ensure functionality, identify defects, and validate the design.
- Analyzed process parameters to refine microfabrication techniques and improve device yield.

Developed SNES Street Fighter 2 using System Verilog — April, 2023 → May, 2023

- Coded modules in System Verilog which handle multiple sections of the game simultaneously
- Numerous modules created to make it more efficient to debug, understand, and improve
- Drivers integrated to receive keyboard signals and send out VGA signals within the board
- Wrote a thorough, concise, and formal lab report relating to the specific details of the game

---

Skills:

- PCB Design, KiCad
- System Verilog, HDL
- C Language
- Python
- MATLAB
- PTC Creo / SolidWorks
- Seal of Biliteracy in Spanish & English

Awards:

- UIUC Knight of St. Patrick's Awardee
- Intel Scholar
- UIUC ARISE Scholar
- ILLCF Scholarship Recipient
- Hispanic Scholarship Fund Recipient
- HRP Scholarship Recipient
- Wentcher Scholarship Recipient