

# Gabrielle MacNeil

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## Permanent address

87 Emerald Lane, Dover, NH 03820

## EDUCATION

- 2024-Present      **Ph.D.**, Doctor of Philosophy in Electrical and Computer Engineering, University of New Hampshire, Durham, NH
- Expected graduation May 2028
  - GPA: 4.0
  - NSF GRFP Recipient
- 2020–2024      **BSc**, Business in Computer Engineering, Loyola University Maryland, Baltimore, MD, with a concentration in Electrical Engineering
- Graduated Summa Cum Laude, May 2024
  - Minors: Business Information Systems and Data Analytics, Innovation and Entrepreneurship, Mathematics
  - Relevant Coursework: Quantum Computing, VLSI, Systems Engineering
  - GPA: 3.8

## HONORS

- 2024-Present      NSF GRFP
- 2023-2024      Dean's List Senior Year
- 2022-2023      Dean's List Junior Year
- 2021-2022      Dean's List second semester Sophomore
- 2020-2021      Dean's List Freshman Year
- 2020-2024      Loyola Presidential Scholarship
- 2020              Saint Thomas Aquinas Award
- 2020              Saint Thomas Aquinas Theology Department Award
- 2019              Saint Thomas Aquinas Junior Speech Winner
- 2019              Susan B Anthony and Frederick Douglas Award
- 2016-2020      Highest Honors all four years of high school

## RESEARCH EXPERIENCE

- 01/2023–04/2023      **Student: Loyola Quantum Computing Simulator**
- Worked in a group of four students (computer engineering, computer science, and physics majors) to build a quantum computing simulator in Python.
  - Took on a leadership role as one of two juniors from a team consisting of two juniors, one sophomore, and one freshman.
- 09/2022–12/2022      **Student: Loyola Junior Design Project**
- Participated in the inaugural class of the junior design project.
  - Led a team of five engineering students to build a functional rover and student-designed attachment in preparation for the senior design capstone project.

- Problem solved, designed, and built a functioning lift at the front of the rover that was controlled with a wireless remote.
- Soldered custom PCB and H Bridge drivers that connected to DC and Servo Motors.
- Altered the given code to connect and function with the given controller.

## SERVICE/LEADERSHIP

- 12/2022–Present **Member**, Loyola Engineering Industry Advisory Board
- Chosen by the Loyola engineering faculty as the class of 2024 IAB representative.
  - Collaborate with a group of elite engineers from Maryland to provide feedback, support, and advice about the Loyola engineering program and curriculum.
- 09/2022–Present **Vice President**, Loyola IEEE, Baltimore, MD
- Work with fellow Loyola engineering students to further understand different machines and devices used in computer and electrical engineering such as Arduino's, ELVIS Boards, and LCDs.
  - Lead the teaching of new members, freshmen, and sophomores about various aspects of computer and electrical engineering such as the fundamentals of Digital Logic and how to operate an Arduino and its code.
- 08/2021–05/2022 **Member**, Loyola University Maryland Student Athlete Leadership Program
- Selected from a large pool of athletes to meet twice a semester to discuss skills that make a strong impactful leader.
  - Implemented the skills learned from the meetings in practice to encourage a stronger team dynamic and program.

## RELEVANT EXPERIENCE

- 05–08/2021; 05–08/2022 **Rotational Intern**  
Formax, Dover, NH
- Attended engineering and software meetings with the CEO, president, and vice president to learn the various responsibilities of the engineers and how the department is run and organized.
  - Created a reference guide for the government to use for specific data destruction machines.
  - Collaborated with the head of the marketing department to design brochures about the products, develop user and parts manuals, and improve the company website.
  - Designed and edited international information packets for Formax customers around the world.

**CAMPUS INVOLVEMENT**

- 08/2022–Present     **Member**, Club Field Hockey Loyola University Maryland
- Spend up to 10 hours a week practicing as a team and building team culture by organizing team runs.
  - Taking on the challenge of playing a new sport in college while dedicating the time and patience to learn and practice foreign skills and techniques.
- 08/2020–05/2022     **NCAA Division 1 Student Athlete**, Women’s Rowing Team, Loyola University Maryland
- Dedicated 20 hours per week to practicing and competing while carrying a full course load.
  - Met with prospective student-athletes to discuss Loyola, its curriculum, the benefits of being a college athlete, and the rowing program.

**PERSONAL WEBSITE**

- Academic and professional exhibits
- gabbiemacneil.com

**SKILLS/CERTIFICATIONS**

- **Technical Skills:** Knowledgeable in Qiskit, Python, SQL, C/C++, Java, Arduino, CAD, and MATLAB
- **Certifications & Training:** MATLAB trained and certified through MATLAB

**REFERENCES**

Dr. Qiaoyan Yu: Graduate Academic Advisor  
Department of Engineering, University of New Hampshire  
603-862-1546, Qiaoyan.Yu@unh.edu

Dr. David Hoe: Undergraduate Academic Advisor  
Department of Engineering, Loyola University Maryland  
410-617-5584, dhhoe@loyola.edu

Dr. Yanko Kranov: Junior Design Advisor  
Department of Engineering, Loyola University Maryland  
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