

Kevin Masel

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Northville, MI

EDUCATION

UNIVERSITY OF MICHIGAN, ANN ARBOR, MI

B.S.E. in Materials Science & Engineering, Engineering Honors Program, Minor in Mathematics, Minor in Music May 2024

- GPA: 3.95/4.00
- Honors: 5 term James B. Angell Scholar (effective March 2023), 7 terms Dean's List & University Honors
- Scholarships: 2x Clarence A. Siebert Memorial Scholarship, Robert F. and Carol E. Mull Scholarship, Tau Beta Pi National and Chapter Scholarships, William C. Ford Jr. Scholarship, William J. Branstrom Freshman Prize
- Course Highlights: Fundamentals of Battery Design, Materials Characterization, Materials Processing + Product Design, Materials Kinetics, Thermodynamics of Materials, Physics of Materials, Structures of Materials, Materials Lab I + II, Solid Mechanics I + II, Composite Materials, Advanced Math for Engineers, Matrix Algebra

EXPERIENCE

FORD MOTOR COMPANY, ROMULUS, MI

Advanced Product Development and Technology Intern – Ford Ion Park *Beginning May 2024*

UNIVERSITY OF MICHIGAN, ANN ARBOR, MI

Research Assistant - Thornton Group *May 2022 - Present*

- Developing a coupled electrochemical and micromechanical model of porous electrode theory applied to all-solid-state batteries
- Simulating Li-ion battery performance through applications of computational materials science utilizing COMSOL Multiphysics
- Analyzing the affect that HOLE and bilayer anode architectures for optimizing Li-ion battery systems under fast-charging conditions
- Effectively communicating with a team of other undergraduate and graduate students to conduct groundbreaking research

Grader - MATSCIE 350 (Structure of Materials) *September 2023 – December 2023*

- Responsible for grading homework submissions of 72 students, providing explicit comprehensive feedback for incorrect answers
- Created equitable grading schematics based on grasp of material providing students with appropriate grades for their work
- Coordinated with Professor Liang Qi to assure students are receiving accurate and prompt feedback in advance of class assessments

FALL ENGINEERING CAREER FAIR, HOSTED BY SWE/TBP, ANN ARBOR, MI

Director *December 2022 – December 2023*

- Responsible for organizing, advertising, and operating the 2023 Fall Engineering Career Fair, with over 280 companies present
- Worked with University of Michigan CoE Leadership and staff to coordinate the event within university recruiting guidelines
- Collaborated within a team of 4 directors and managing 27 chairs to cover every aspect of the fair for its 7500+ student attendance

Volunteer Committee Chair *April 2022 – December 2022*

- Responsible for recruiting, advertising, and managing over 250 volunteers for the 2022 Fall Engineering Career Fair
- Worked with other organizations on campus to increase volunteer numbers and award service hours to volunteers accordingly

PRATT & WHITNEY, EAST HARTFORD, CT

Materials & Processes Engineering Intern - Clearance and Tribological Materials *May 2023 – August 2023*

- Analyzed corrosion characteristics of metallic abradable coatings to determine applicable solutions for LPC OASs in GTF engines
- Developed standard operating procedures for scratch testing to characterize and down select materials for expensive rub testing
- Utilized laboratory equipment including scratch testers, profilometers, and microscopes whilst performing detailed data analysis

EXTRACURRICULARS

TAU BETA PI, MICHIGAN GAMMA (MI-G)– UNIVERSITY OF MICHIGAN

President *December 2023 – Present*

- CEO and COO of the MI-G chapter of the Tau Beta Pi Association, responsible for overseeing all chapter meetings and events
- Empower all officers through public recognition and by providing the necessary resources to ensure significant growth in the chapter
- Overseeing the operations and finances of the chapter, ensuring the long-term wellbeing of the chapter for years to come

External Vice President *December 2022 – December 2023*

- Coordinated the CoE Leaders and Honors Awards and the Fall Engineering Career Fair, managing six figures worth of finances

Campus Outreach Officer *April 2022 – December 2022*

- Expanded the TBP Tutoring Service by collaborating with the University of Michigan NROTC Battalion to provide group tutoring

MICHIGAN MATERIALS SOCIETY – UNIVERSITY OF MICHIGAN

Undergraduate Committee Representative *March 2023 – Present*

- Collecting feedback and suggestions from undergraduate students, relaying data to appropriate administrators during UGC Meetings
- Serving on the executive board of the Michigan Materials Society, responsible for making decisions within the organization

ADDITIONAL

- Awaiting a second author publication on my research regarding the fast-charging of Lithium-ion batteries in the Thornton Group
- Applied to the National Science Foundation Graduate Research Fellowship Program (GRFP) in Materials Research
- Experience with MATLAB, Office; SEM, FTIR, EDS, Vickers Microhardness, and other laboratory characterization techniques
- Effective leader, writer, communicator, and team facilitator, very punctual, and enjoys collaboration within teams of various skillsets
- Enjoy being active with activities such as road cycling and disc golfing, as well as playing various sports recreationally