

Emmett E. Galles

262-443-6051 | eegalles@gmail.com | 1862 Ontario Place NW, Apartment #2, Washington, DC 20009

EDUCATION

University of Wisconsin-Madison

Graduation Date: May 2021

- * B.S. Double Major: Engineering Mechanics, Mathematics
- * Cumulative GPA: 3.78/4.00
- * Dean's List (all semesters)

WORK EXPERIENCE

Guidehouse | Washington, D.C.

July 2021 - present

Sustainability Consultant

- * Draft and publish technical regulatory documents for amending the US federal energy conservation standards and test procedure for external power supplies.
- * Test and reverse-engineer over fifty external power supplies to develop effective cost-efficiency relationships for a market of over 10,000 models.
- * Address competing comments from manufacturers, advocacy groups, and government agencies in both written text and during public meetings throughout the legislative process.

Notbohm Research Group | Madison, WI

May 2019 - May 2021

Undergraduate Researcher

- * Wrote more than forty MATLAB scripts to parse microscopic images and establish quantitative metrics that compare image analysis methods.
- * Used finite element analysis to model a limit case of an experimental procedure and present results in figures used in future publications.
- * Learned and performed foundational lab techniques for epithelial cell division in adherence with lab safety standards.

Undergraduate Learning Center | Madison, WI

August 2018 - May 2021

Head Tutor

- * Tutored college students in both one-on-one and group settings in fundamental engineering and math courses.
- * Led a group of fifteen tutors to provide a consistent learning resource for over fifty STEM courses.

L'Etoile Restaurant: Madison, WI

September 2017 - August 2018

Service Assistant

- * Learned technical and intricate service details of a fine-dining restaurant to complete training within four shifts.
- * Maintained composure and high standards while handling multiple responsibilities in hectic situations.

SELECTED PUBLICATIONS

- * *Spatiotemporal force and motion in collective cell migration*, Nature Scientific Data ([link](#)) June 2020
- * *MATH 521 (Analysis I) Course Notes*, GitHub ([link](#)) July 2020
- * *Coordinated tractions increase the size of a collectively moving pack [...]*, Extreme Mechanics ([link](#)) October 2021
- * *Effect of matrix heterogeneity on cell mechanosensing*, Soft Matter ([link](#)) December 2021

SKILLS

Microsoft Office, MATLAB, Python, L^AT_EX, SolidWorks, Windows 10, ImageJ