## Zach Griebel

# Computational Data Science & Physics

#### **Zach Griebel**

St. Paul, MN 651.276.9408

zgriebel01@hamline.edu https://zgriebel.github.io

December 2023 graduate with 2.5 years of intern experience working in software development and data analysis for practical research and applications. Double major in Computational Data Science and Physics.

**Experienced** in R, Python and SQL

#### **Education**

#### Hamline University / Computational Data Science & Physics / 3.9 GPA

August 2019 - December 2023, St. Paul MN

Member of Football Team

August 2019 - December 2023

Football Captain

April 2022 - December 2023

### Experience

#### Fabcon / Material Engineer Intern

May 2023 - August 2023, Savage MN

Lead research to reduce carbon emissions of company's primary product. Designed experiments to collect and visualize data for executive team to make decisions. Created model to optimize the product design.

Developed concrete mix design that reduces Carbon Emissions by 12% with equivalent performance and price. When fully implemented this design will impact 85% of the product.

#### **Hamline University** / Researcher

April 2021 - November 2023, St. Paul MN

Lead medical research to replace grip-strength evaluation with an alternate, remote method. With team, designed prototype, collected data, and provided statistical analysis and modeling.

Lead author of peer-reviewed <u>research</u> published in *Journal of Clinical Cases & Reports*, where our statistical analysis combated current literature. Model and prototype is statistically classified as "reliable" by the American Medical Association standards.

#### RateFast Corp. / Quality Assurance Intern

January 2022 - May 2023, Remote

Worked under the lead software developer testing the companies websites and applications. Wrote design specifications and updates for developers.

Worked under the head of the marketing department with front end development. Assisted in website design and ran the companies social media accounts.

#### **Hamline University** / Physics Lab Grader

January 2023 - December 2023, St. Paul

Worked with physics professors to design lab rubrics and grade lab notebooks.

#### **Hamline Elementary / Mentor & Tutor**

January 2020 - March 2020, August 2023 - December 2023, St. Paul

Tutored students individually and in groups. Student-Athlete Mentor for 3rd grade class with learning and behavior delays.

Took students on tours of Hamline University to encourage their pursuit college with the Hamline "Hand-in-Hand" program.