

# Zach Wetmore

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## EDUCATION

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*University of Minnesota, College of Science and Engineering*  
**Bachelor of Science, Mathematics-Actuarial Science Emphasis**  
**Bachelor of Science, Computer Science**  
**Minor, Statistics**

*Minneapolis, MN*

May 2025 - Expected  
GPA: 3.8

## TECHNICAL SKILLS & ACTUARIAL EXAMS

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**Programming & Software Tools:** Python, SQL, C/C++, C#, Java, JavaScript, OCaml, Matlab, Excel, Docker, Django  
**Machine Learning & AI Tools:** NumPy, Pandas, scikit-learn, Matplotlib, Seaborn, Generative AI (OpenAI, Cursor, etc)  
**Version Control Systems:** Git/Github, Subversion  
**Actuarial Exams Passed:** Financial Math (FM), Probability (P)

## WORK EXPERIENCE

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*Allianz Life*

*Golden Valley, Minnesota*

### **Actuarial Internship - Modeling & Systems**

May 2024 - August 2024, March 2025 - Present

- Utilized actuarial mathematics, Risk Agility FM/C++, and Excel to optimize actuarial models with the goals of extensibility, maintainability, and efficiency.
- Exhibited effective communication abilities in an Agile/Scrum team setting
- Enhanced a web application for a parallel processing engine to run model projections using the Django framework.

*Colder Products Company (CPC)*

*Arden Hills, Minnesota*

### **Software Engineering Co-Op**

Jan 2024 - April 2024

- Designed and implemented graphical user interfaces (GUIs) for RFID device testing software using C# and Windows Forms.
- Applied a layered architecture pattern, similar to the Model-View-Controller (MVC) design pattern to manage XML serialization.

## PROJECT EXPERIENCE

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### **Football Scouting Report**

January 2025 - Present

- Developed and maintained a Python-based data analysis pipeline, automating ETL processes for complex sports data while ensuring data integrity through robust cleaning and preprocessing routines.
- Applied advanced statistical analysis and visualization techniques (Pandas, Matplotlib, SciPy) to derive actionable insights, leveraging hypothesis testing, and data visualization to enhance decision-making.

### **Spotify-Apple Music Program**

November 2024

- Developed a Python application to transfer playlists between Apple Music and Spotify, enabling importing, creating, and formatting. Integrated AppleScript and Spotify's Web API to automate playlist migration and song addition.
- Engineered a multi-threaded solution for adding songs to Spotify playlists, with additional optimizations for managing API rate limits effectively.

### **Custom Shell Program, 4041 Introduction to Operating Systems**

October 2024

- Developed a custom Unix shell in C, implementing features such as signal handling, job control, and command execution, enhancing system interaction and process management capabilities.
- Leveraged Docker to containerize the shell application, ensuring consistent execution environments and simplifying deployment across different systems.

## LEADERSHIP EXPERIENCE

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**Big Brothers Big Sisters, Big Brother**, 2018 – Present

**Weight Room Instructor, Medford High School**, Summer 2020