Brett Schumacher

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https://theshoes.itch.io/

EDUCATION

Bachelor of Science in Computer Science, Astrophysics Minor   Expected May 2023
College of Science and Engineering, *University of Minnesota-Twin Cities Minneapolis, MN*
GPA: 4.0 – University Honors Program
Relevant Completed Coursework: Alg. & Data Structures, Adv Programming Principles, Discrete Structures of Computer Science, Math Methods for Physicists
Fall 2021 Coursework: Machine Architecture & Organizations, Animation & Planning in Games, Applied Linear Algebra, Analytical Mechanics
Spring 2022 Coursework: Program Design & Development, Fundamentals of Computer Graphics I

RESEARCH EXPERIENCE

UROP (Undergraduate Research Opportunity Program), UMN   Summer 2021
Under guidance of Professor Evan Suma Rosenberg
- Developed a dynamic framework for the creation of Virtual Reality environments, allowing them to rescale automatically to fit a user's physical space.
- Utilized Unity Engine to develop the framework
- Submitted a poster showcasing framework to the UMN Digital Conservatory
  - https://conservancy.umn.edu/handle/11299/223271

Research Assistant, UMN Computer Science and Engineering   November 2020 – Present
Professor Evan Suma Rosenberg's Illusioneering Research Lab
- Developed a Virtual Reality application to increase awareness of social distancing using the Unity engine, submitted and accepted to the IEEE VR 2021 conference.
  - https://ieeexplore.ieee.org/document/9419275

Research Assistant, **UMN Computer Science and Engineering**   December 2019 – November 2020
Under Professor Maria Gini on the development of a music station chatbot for the National Association of Broadcasters PILOT Innovation Challenge.
- Awarded funding to create chatbot that could interact with radio show listeners
- Implemented much of the logic of chatbot responses, especially for inquiries about playlist information using the Mindmeld chatbot framework
- Assisted in implementation of a frontend interface for the chatbot through use of Angular

HONORS/AWARDS

Industrial Affiliates Council Access Scholarship   Fall 2021 – Spring 2022
UMN Gold Scholar   2019 – Present
College of Science and Engineering Dean's List   Fall 2019 – Spring 2021
National Merit Finalist, Washington High School   Spring 2019

ACTIVITIES

Member, UMN Video Game Development Club   Fall 2021 – Present
Member, UMN Society of Physics Students   September 2019 – Present
Member, UMN Music Production Student Group   March 2020 – Present

SKILLS

Programs: Unity Engine, Windows OS, Linux, Microsoft Office (Word, Excel, PowerPoint)
Programming Languages: Python, Java, C/C++, C#, Ocaml