Michael Boschwitz

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Leadership & Awards

立命館大学衣笠 SKP
Video Game Dev Club VP
BSA Eagle Scout
Tri-M Music Honor Society
UMN Dean's List

Languages + Skills

Natively fluent:
- C, C++, C#, Java, Python,
- HTML, JS. CSS, Bootstrap
- Unity, Unreal, Git/Perforce
(Plus, I make good coffee!)

Conversationally fluent:
- PostgreSQL, SQL, Lua
- Kotlin, Swift, LaTeX
- Japanese

Tourist:
- React.js, Next.js, Ruby,
- Rust, x86, Go, Scala, R

Activities

Intramural Volleyball
Jazz Band Drummer
Game Jams
Fighting Game Club

Ask Me About

Studying abroad in *Kyoto*
Some of my favorite *Movies*
Almost anything *Musical*
My love for *Games/Technology*

Education

Masters in Computer Science
University of Minnesota, Fall 2025 - Spring 2027
   Notable Classes: Intro to Quantum Computing, Artificial Intelligence I,
   Intelligent Visual Information Systems, XR Tools and 3D Drawing.

Software Engineering and Creative Design, BIS
University of Minnesota Undergrad, Spring 2023, Minor in Japanese Studies

Work Experience

Software Engineer (Gameplay) Avalon Corp. │ June – Dec. 2024

- Architected a scalable, modular framework for character abilities and interaction logic, enabling rapid iteration with simple tools and long-term maintainability.
- Refactored the animation pipeline, implementing data-oriented design principles to enhance performance, scalability, and support large-scale multiplayer sessions.
- Engineered core gameplay subsystems, including input buffering, animation canceling, and the combo system and data structures for dynamic user inputs.

Teacher Assistant University of Minnesota │ Fall 2022

- Provided technical guidance on Virtual Reality development, with a focus on interaction design and best practices, for a class of approximately 60+ students.
- Reviewed and improved students' projects by offering concise, actionable feedback on project implementation, real-time rendering, and interaction design.

AI Intern Hangar 13 │ Summer 2021

- Developed and implemented AI decision-making systems for a multiplayer open-world AAA game, improving both agents behavior and responsiveness.
- Optimized performance by profiling CPU and GPU usage, debugging logic processing systems, and reducing computational overhead.
- Diagnosed pitfalls with the reasoning systems, resolving complex pathfinding, dynamic threat assessment, 3D spatial awareness, and behavior tree issues.

Projects

Dynamically Adjustable Motion Captured Data Renderer

VR & 3D Interaction Projects	Water Fluid/Pressure Simulations
Physics & Cloth Simulations	Bus Scheduling Simulator

A more comprehensive list of all projects is located on my website.

React Bot Personal Projects │ Python, PostgreSQL

- Designed and built a feature-rich Discord bot that uses real-time message parsing to send unique responses to users in both guilds and direct messages.
- Released and actively maintained post-release, ensuring 99% uptime, monitoring performance, and rolling out updates for 500+ active Discord servers she's in.