

Alex Hetrick

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• ventuar.com

PROFILE

Versatile and detail-oriented software engineer seeking to apply skills and expertise to gain experience in the software industry. Passionate about creating practical and meaningful software products that push boundaries and benefit the lives of others. Available for a co-op position in Spring 2024. Strengths in:

- Iterative Development in Agile Environments
- Elegant and Responsive Website Design
- Documentation of Software Design
- Client Needs and Requirements Articulation
- Empathy-driven Interpersonal Communication
- Software Development in 3D Interactive Environments

EDUCATION

Software Engineering B.S., Rochester Institute of Technology | **May 2026** | GPA: 3.95/4.0

RELEVANT EXPERIENCE

Low Poly Underwater Pack, Tool Development | u3d.as/2B70

Designed, developed, and publicly released an all-in-one underwater-themed package of tools, assets, and resources to assist game developers in making their own projects and games. Currently for sale on the Unity Asset Store and CGTrader.

- Constructed a Boids algorithm-based AI with dynamic obstacle detection for simulating flocking fish in realtime
- Researched GPU computing to develop procedural water generation/simulation with custom lighting and shading
- Effectively communicated with numerous clients and customers to resolve support requests, troubleshooting questions, and unforeseen bugs
- Sold to and downloaded by over 200 developers with an average rating of 4.8/5.0

Tools: Unity, Blender, C#, HLSL, Git, Trello, Notion, Inkscape

Game Jams, Game Development | ventuargames.itch.io

Designed, developed, tested, and released 5 video games from scratch each with time frames ranging from 42 hours to 1 week. Games adhered to thematic design restrictions and creatively utilized them to craft unique and fun player experiences.

- Each game rated in the top 20% of all submissions by other participants in the game jam
- Presented games to 100+ individuals at local indie game exhibits in the Rochester area

Tools: Unity, Blender, C#, Git, Notion, Inkscape, Trello, FL Studio

PROFESSIONAL EXPERIENCE

Technology Intern, M&T Bank Corporation

Buffalo, NY | June 2023 - August 2023

Collaborated with a team of interns and full-time employees to automate the deployment of SQL Server Integration Services (SSIS) packages using DevOps practices and GitLab CI/CD pipelines.

AI/ML Implementation Specialist, Rochester Institute of Technology

Rochester, NY | December 2022 - May 2023

Led a team of 3 students working on an NSF-funded research project, focusing on using and evaluating Multi-Armed Bandit (MAB) machine learning models to identify faulty sensor readings in Autonomous Connected Vehicles (ACVs).

- Created the Multi-Armed Bandit Evaluator (MABEL), which robustly simulates a system of ACVs to fairly evaluate various MAB models' ability to detect compromised/faulty distance sensor readings in real-time
- Researched, implemented, and fairly evaluated 6 different MAB models using academic papers as reference
- Presented MABEL at the North Eastern region of the national Consortium for Computing Sciences in Colleges as well as Imagine RIT, showcasing our work to people of all age ranges and technological backgrounds
- More information about MABEL can be found here: icmab.github.io/MABEL/

Course Assistant, Rochester Institute of Technology

Rochester, NY | August 2022 - December 2022

Assisted ~40 students with course assignments for SWEN-261, Intro to Software Engineering, a class introducing computing students to fundamental process, design, and implementation concepts in software engineering.

- Offered instructional aid and supplemental workshops in web development, software process/design, agile methodologies, object-oriented coding concepts, and version control
- Provided constructive and actionable feedback on 30+ graded assignments and 5 semester-long project deliverables