Alex Hetrick

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EDUCATION

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

SKILLS

Languages & Frameworks: Python, Java, C#, React, Angular, HTML/CSS/JS, Bootstrap, TailwindCSS, PostgreSQL Tools: Aaile, SCRUM, REST APIs, Git, GitLab CI/CD, Jira, Confluence, Trello

PROFESSIONAL EXPERIENCE

Technology Intern

June 2023 - Aug 2023

M&T Bank Corporation | Buffalo, NY

Collaborated with a team of interns and full-time staff to automate SQL Server Integration Services (SSIS) package deployment using DevOps practices

- Built a Gitlab CI/CD pipeline that reduced deployment time for SSIS packages by 95%, with additional status form checks and rollback capabilities for DEV, CERT, and PROD environments
- Developed a Python tool interfacing with the GitLab API to streamline the integration of this pipeline into SSIS package repositories
- Laid the groundwork to automate package deployment for 500+ packages bank-wide, saving ~2000 hours of development time annually, reducing 90% of human error risks, and saving up to \$1.5 million annually

Tools: GitLab, Python, YAML, SQL, Jira, Confluence, Postman

AI/ML Implementation Specialist

Dec 2022 - June 2023

Rochester Institute of Technology | Rochester, NY | icmab.github.io/MABEL

Led a 3-student team on an NSF-funded research project developing a novel evaluation mechanism for Multi-Armed Bandit (MAB) machine learning models

- Created the Multi-Armed Bandit EvaLuator (MABEL): A system that evaluates MAB models' proficiency in the real-time detection of compromised/faulty distance sensor readings in simulated autonomous connected vehicles
- Implemented and assessed 6 unique MAB models, referencing academic papers to ensure model accuracy
- Showcased MABEL at the North Eastern region of the Consortium for Computing Sciences in Colleges and at Imagine RIT, introducing our work to audiences of all age ranges and technological backgrounds

Tools: Python, Numpy, Pandas, Plotly, Git

Course Assistant Aug 2022 - Dec 2022

Rochester Institute of Technology | Rochester, NY

Supported ~40 students in SWEN-261, Intro to Software Engineering, covering fundamental software engineering concepts

- Offered instructional aid and supplemental workshops in web development, software design, agile methodologies, object-oriented programming concepts, and version control
- Provided constructive and actionable feedback on 30+ graded assignments and five semester-long project deliverables **Tools:** Java, Spring Boot, TypeScript, Angular, HTML, CSS, Git, Trello, Slack

RELEVANT EXPERIENCE

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

Developed and publicly released a comprehensive toolkit of underwater-themed scripts and resources for game developers. Currently for sale on the Unity Asset Store and CGTrader

- Garnered over 200 sales with an average store rating of 4.8/5.0
- Designed a dynamic Boids algorithm-based Al for real-time flocking fish simulation with dynamic obstacle detection
- Utilized GPU computing to develop procedural water generation, integrating custom lighting and shading techniques
- Facilitated communication with clients over email, closing 30+ support requests and bug reports

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

Personal Website, Web Development | ventuar.com

Crafted an elegant and responsive portfolio website using React and Bulma to showcase my expertise and accomplishments

- Engineered accessible and responsive UI ensuring a high-quality site experience on any device
- Achieved a 50% reduction in load times through resource optimization and efficient styling
- Implemented diverse web functionalities such as custom contact forms, dynamic navigation bars, and carousel displays **Tools:** React, Bulma, JavaScript, HTML, SCSS, Node.js, Git, Notion