Alex Hetrick

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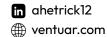## EDUCATION

B.S. Software Engineering, Rochester Institute of Technology | Minor in Philosophy | **May 2026** grad | GPA: 3.97
Available for full-time SWE roles starting June 2026

SKILLS

Languages & Frameworks: Python, Java, TypeScript, JavaScript, C#, C, SQL, Node.js, React/Next.js, Angular
DevOps & Tools: GitLab CI/CD, AWS, Docker, Jest, Tailwind CSS, Figma

PROFESSIONAL EXPERIENCE

Software Engineering Intern
Jan – May 2025
◤ Tesla | Fremont, CA   tesla.com/energy/design

Built and shipped public-facing ordering flows for Tesla Energy products (Solar, Powerwall, Wall Connector), serving hundreds of thousands of users each month

- Owned redesign of Solar and Powerwall order configurators; shipped interactive visx charts and UI refactors that moved 25% more visitors from the landing page to a quoted system and raised add-on Powerwall selections by 47%
- Migrated core sections of the team's eight-app monorepo from JavaScript to TypeScript, raising typed coverage from 26% to 42% and improving code reliability and developer onboarding speed
- Built the Commercial Wall Connector B2B site, introducing the team's first Next.js App Router structure as a reusable pattern for future migrations from the Pages Router
- Acted as front-end lead for 1 month after a headcount reduction, triaging 30+ launch-blocking issues with product and QA and keeping releases on schedule

Tools: React, Next.js, TypeScript, visx, React Spring, Figma

Full-Stack Developer Co-op
Jan – Aug 2024
◤ BMW Group | Greer, SC   bmwchargeforward.com

Contributed to BMW ChargeForward, a smart-charge optimization engine for scheduling BMW EV charging

- Led frontend integration of ChargeForward into the My BMW mobile app, constructing 30+ production screens and custom UI components that shipped to thousands of EV drivers
- Surfaced and drove fixes for 50+ defects pre-launch through proactive hands-on testing and QA collaboration
- Expanded and refactored core features across three production codebases, improving code quality, reliability, and UX
- Partnered with product owners to pitch features, lead problem-solving sessions, and regularly demo progress, influencing Q2 and Q3 roadmap priorities

Tools: React, Angular, NestJS, PostgreSQL, Chakra UI, Postman

Technology Intern
June – Aug 2023
◤ M&T Bank | Buffalo, NY

Modernized SQL Server Integration Services (SSIS) package deployment processes via DevOps automation initiatives

- Built a GitLab CI/CD pipeline and Python auto-integration tool for SSIS package repositories, cutting deployment times by 95% and manual error risk by 90%
- Prepared rollout path for 500+ packages bank-wide, with projected savings of around 2,000 dev hours and $1.5M annually as pipeline adoption scales

Tools: GitLab, Python, YAML

AI/ML Implementation Specialist
Dec – June 2023
◤ RIT AWARE Lab | Rochester, NY   icmab.github.io/MABEL

Led a 3-student NSF research project building MABEL, a system to test machine learning models' ability to detect sensor failures in autonomous vehicle simulations

- Implemented and benchmarked six multi-armed bandit (MAB) models from academic literature, adapting each model to the simulation environment using a MAPE-K adaptation loop
- Presented MABEL to diverse technical and public audiences, with demos and media for non-experts

Tools: Python, Numpy, Pandas, Plotly