Alex Iliarski

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EDUCATION

University of Minnesota – Twin Cities, Minneapolis, MN
M.S. Computer Science, *Minor: Data Science, Minor: Robotics* | **GPA: 4.00**   *Expected May 2026*
B.S. Computer Science | **B.S.** Mathematics, *Specialization in Computer Applications* | **GPA: 3.95**   *Dec 2024*
- *Courses*: Intelligent Agents, Deep Learning, Machine Learning Fundamentals, Database Systems, Applied Machine Learning, Data Science I, Software Engineering II, Artificial Intelligence II, Intelligent Robotics Systems, Robot Vision, Natural Language Processing, Cryptology and Number Theory, Math of Quantum Computing.
- *Co-founder*: Virtual Reality Club, Computer Hardware Club; *Member*: ML Club, AI Club, AWS Cloud Club

EXPERIENCE

Software Engineer - *PAR Technology*, St. Louis Park, MN   May 2025 – Present
Software Engineering Intern - *Delaget*, St. Louis Park, MN   May 2024 – Aug 2024
- Designed and implemented a new approach to programmatic login by using saved Playwright browser state in C#, unlocking $300,000 ARR.
- Developed a new product within an existing client-facing web application, working closely with Early Access clients to refine requirements rapidly.
- Optimized and implemented SQL Server stored procedures, improving query performance and reducing runtimes.
- Full-stack software engineering in a Scrum environment: React, TypeScript, REST APIs, C#/.NET, and SQL Server.

Web Programming Intern - *LinkUp*, Minneapolis, MN   May 2023 – Nov 2023
- Designed, developed, and maintained over 500 dynamic PHP scripts integrated with regex patterns to efficiently scrape diverse company career pages for job titles, descriptions, locations, categories, etc.
- Updated scripts to fulfill evolving business requirements, extracting additional metadata from job postings.
- Adhered to company scraping protocols to ensure precise retrieval of job posting details, employing meticulous validation methods to uphold data quality.
- Effectively collaborated within a cross-functional team, quickly adapting to changing scraping requirements.

PROJECTS

First-Person Vision Robot Guidance Using Pointing Gesture
- Developed novel methodology for guiding mobile robots through a human first-person perspective using pointing gestures to select goal objects. Leveraged real-time computer vision techniques to engineer solutions for robot location tracking, orientation estimation, and goal selection.
- Skills: ROS, Python, OpenCV, MediaPipe, YOLO, Robotics, Computer Vision, Technical Writing, Research

TabTime – *Awarded Best MongoDB Atlas Implementation Award at HackUIowa 2023*
- Developed a Chrome extension to track open tabs by domain name, aiding in time management and productivity. Implemented login verification using Auth0. Created a web-based dashboard to visualize data for the top 20 most visited websites and top 5 categories (automatically categorized by OpenAI API).
- Skills: Flask, Python, MongoDB, REST APIs, HTML, CSS, JavaScript, Chart.JS, OpenAI API, Auth0 integration.

HireEquity – *Awarded 3M Most Innovative Solution Award at Analytics for Good Institute (AGI) Hackathon 2024*
- Analyzed over 6 million data points to assess the impact of India's expanded maternity leave on women's IT career applications, using machine learning models and statistical analysis to present findings to industry experts.
- Skills: Data Science, Scikit-Learn, Pandas, NumPy, matplotlib, Python, JavaScript.

SKILLS

Programming Languages: C#/.NET, Python, TypeScript, Java, PHP, C, C++, MATLAB, R, HTML, CSS
Technologies: Git/GitHub, React, Flask, PyTorch, NumPy, Pandas, Spark, Scikit-Learn, Conda, Docker
Misc: SQL, ROS, CI/CD, Agile Scrum, Azure, Octopus Deploy, TeamCity