Andriy Tryshnivskyy

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EDUCATION

Michigan State University — B.S. Computer Science

Expected Graduation - May 2025

Dean's List

EXPERIENCE

Henry Ford Innovations — *Software Development Intern*

January 2025 - April 2025

– Built the iOS version of the MSU-HFH Research Synergy Vanguard Portal (RSVP) to extend platform accessibility beyond the existing web application.
– Connected the iOS frontend to the Flask backend using RESTful APIs, ensuring secure and efficient data communication.
– Developed a responsive and intuitive user interface using SwiftUI, optimizing the app for usability and performance.
– Implemented state management and concurrency handling to improve real-time data synchronization.
– Worked closely with Henry Ford Health clinicians and innovation teams to refine platform functionality and integrate database improvements for scalability and security.

SLE Digital Strategies and Services — *Student Information Technologist I*

October 2022 - PRESENT

– Provided technical support and troubleshooting for a user base of 2,000+ university employees, resolving software and hardware issues promptly to minimize downtime.
– Installed, configured, and maintained computer systems and network equipment, ensuring smooth operation and optimal daily performance.
– Assisted in the planning and execution of technology infrastructure upgrades, including network expansion and integration of a user-friendly interface for intuitive navigation.

NSF REU at North Dakota State University — *Machine Learning and Big Data Analysis Intern*

May 2024 - July 2024

– Conducted research on feature selection methods, focusing on filter, wrapper, and embedded approaches.
– Explored the application of Particle Swarm Optimization (PSO) for feature selection, leveraging its efficiency, ease of implementation, and minimal hyperparameter tuning.
– Developed a guided particle adaptation method integrating three filter-based methods to enhance particle initialization in high-dimensional data scenarios.
– Analyzed the performance and effectiveness of various feature selection techniques using statistical measures.
– Collaborated with faculty and mentors to implement a unique feature selection method using PSO, addressing limitations of existing methods.

SKILLS & TOOLS

-Python
-C/C++
-Java
-JavaScript
-Swift
-React
-Flask
-SQL
-HTML/CSS
-Machine Learning
-Big Data Analysis
-Docker
-GitHub/GitLab

COURSEWORK

-Data Structures and Algorithms
-Object-oriented Software Design
-Web Development
-Mobile Development
-Computer Organization and Architecture
-Artificial Intelligence
-Computer Graphics

LANGUAGES

-English
-Ukrainian
-Russian

Affiliations/ Activities

- Tri-Alpha Honor Society
- First Generation Honors Association
- United Support for Ukraine Fundraising
- SONA
- Key Club International
- Jackpot Entertainment
- MSU Intramural Volleyball