

# Andriy Tryshnivskyy

atryshnivskyy@gmail.com

## 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
- SQL
- HTML/CSS
- Machine Learning
- Big Data Analysis
- Unix/Vim
- GitHub/GitLab

## COURSEWORK

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

## LANGUAGES

- English
- Ukrainian
- Russian

## Affiliations/ Activities

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