AT A GLANCE

4 Researchers. 4 Student Researchers Development of augmented reality (AR) toolkit and platform. AR interface and AR test server developed for industry leaders. Integration of user-friendly AR interface.

Manufacturing Production AR Toolkit

Project Overview

St. Clair College and Industry leaders embarked on a project to develop an AR toolkit. This toolkit is designed to revolutionize how production data is accessed and utilized on manufacturing floors, particularly in the automobility sector.

Purpose and Objectives

To enhance the efficiency and decision-making of on-the-line managers in automobility manufacturing by providing real-time data through an innovative augmented reality (AR) platform.

Company Information

St. Clair College alongside of a Windsor based company known for its advanced software packages that capture and analyze manufacturing data. Their technology enables predictive and prescriptive analysis to redefine production strategies. Together their collaboration allows St. Clair College to continually push the boundaries of AR development.

Approach

- Project Evaluation and KPI Organization
- UI and Design Development
- Server and Data Management
- AR Functionality Development

Deliverables

- **AR Data Display Platform:** An AR interface developed for displaying key performance indicators and manufacturing data in real-time to enhance operational transparency and efficiency.
- **Replica Test Server:** A dedicated server to simulate manufacturing data handling, ensuring the system's functionality and reliability.
- **Phase I Completion:** Successful integration of real-time data into a user-friendly AR interface, with functionalities for data fetching and graphical representation.
- **Next Steps (Phase II):** Expansion of the application to HoloLens technology, allowing for a hands-free experience and further enhancing the suability and accessibility of manufacturing data.