



Group M1.03 – VR & Digitization Experience

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Project Description

The AR Haas 3-Axis CNC Machine Tutorial is an interactive training tool designed to simulate the operation of a Haas 3-axis milling machine covering machine startup, shutdown, and tool and workpiece setup through guided modules and practice exercises.

Project Need

Need for effective training: Modern manufacturing requires safe, efficient, and cost-effective methods for upskilling operators on advanced equipment.

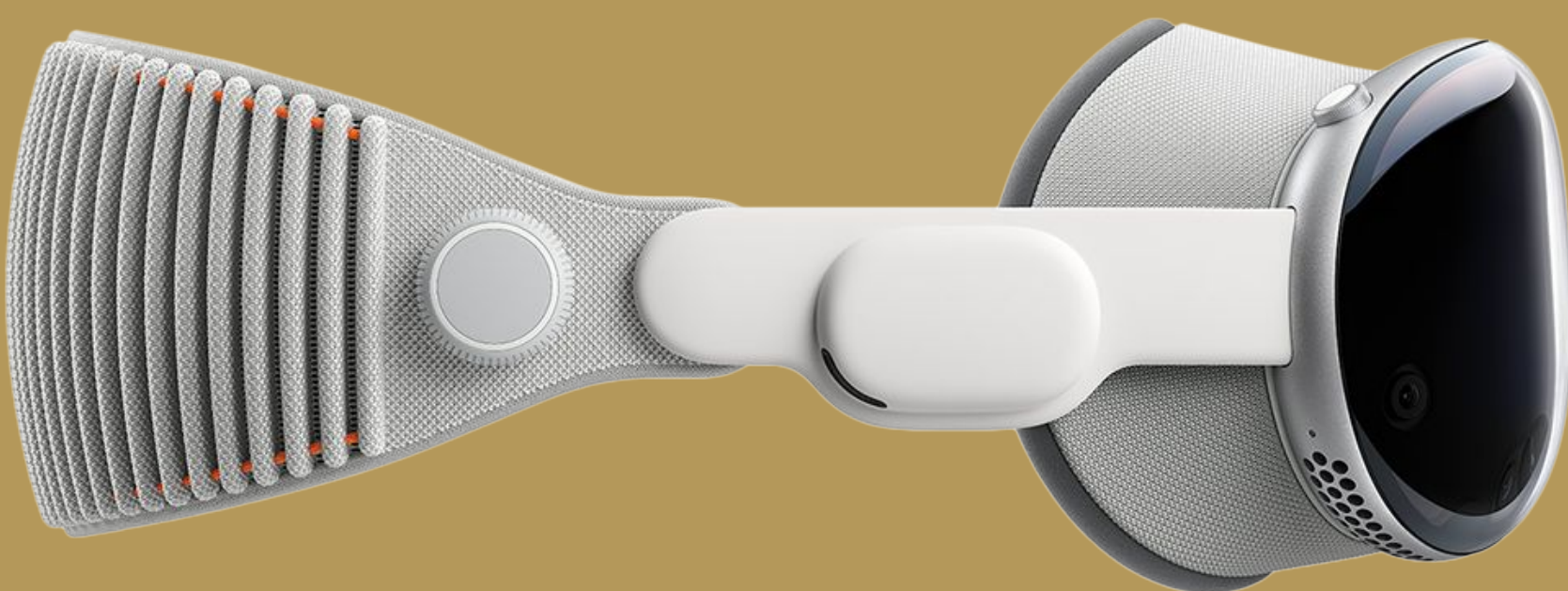
AR Tutorial: Provides an immersive, interactive environment for learning.

Key benefits: Students can learn basic operations without the risks or costs of live machine time.

Technology Used



Haas 3-Axis CNC Machine



Apple Vision Pro

Advantages

- **Safety:** Reduces the risk of injury and machine damage during early training.
- **Cost Efficiency:** Minimizes wear, material waste, and downtime on physical CNC machines.
- **Accessibility:** Allows learners to practice anytime, anywhere, without requiring dedicated shop access.
- **Scalability:** Standardizes instruction across multiple users and sites.
- **Readiness:** Prepares operators with hands-on familiarity before transitioning to real equipment, shortening ramp-up time.

Steps

- Take picture of machine controls and print on wall.
- Get the Apple Vision Pro to recognize as picture.
- Record and edit videos.
- Using Xcode, make a code for the application.
- Implement on Apple Vision Pro.
- Add videos, models and tips on operation.

Meet the Team



Acknowledgements

Sponsor: Abhimanyu Sharotry
Technical Mentor: Dr. Khoi Nguyen
Instructor: Dr. James Davidson
Team: Tyler Babin & Roberto Rios