

School of Informatics, Computing, and Cyber Systems

Control Software for Robotic Nipple

Team: Adriel Perez, Alexander 'Gus' Siegel, Nathan Seitz, Taylor Nielsen **Client:** Christopher Mayerl Ph.D., Associate Professor, NAU Mayerl Lab

Project
Wilbur

Team Mentor: Italo Santos

Motivation

- In 2022, about 1 in 10 babies born in the U.S. were premature.
- 25% of term infants and up to 80% of preterm issues are known to suffer from feeding issues.

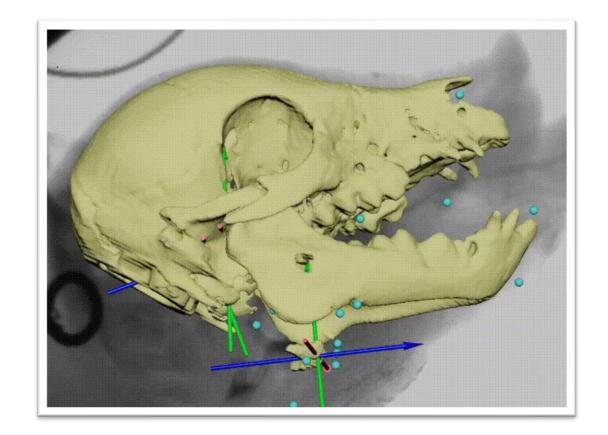
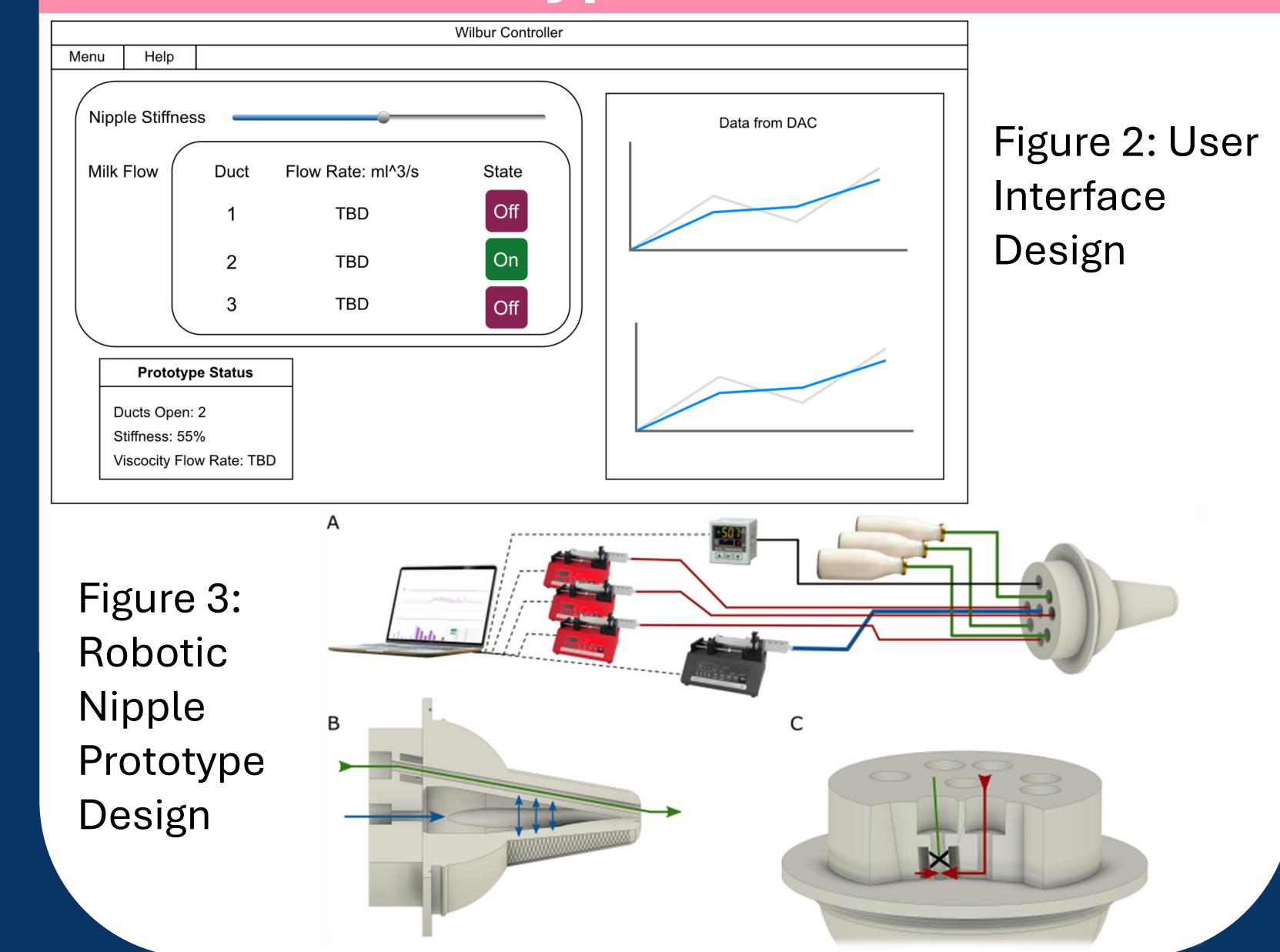


Figure 1: Lab
Xray of infant
pig drinking
from a bottle

Prototype Overview



Architecture

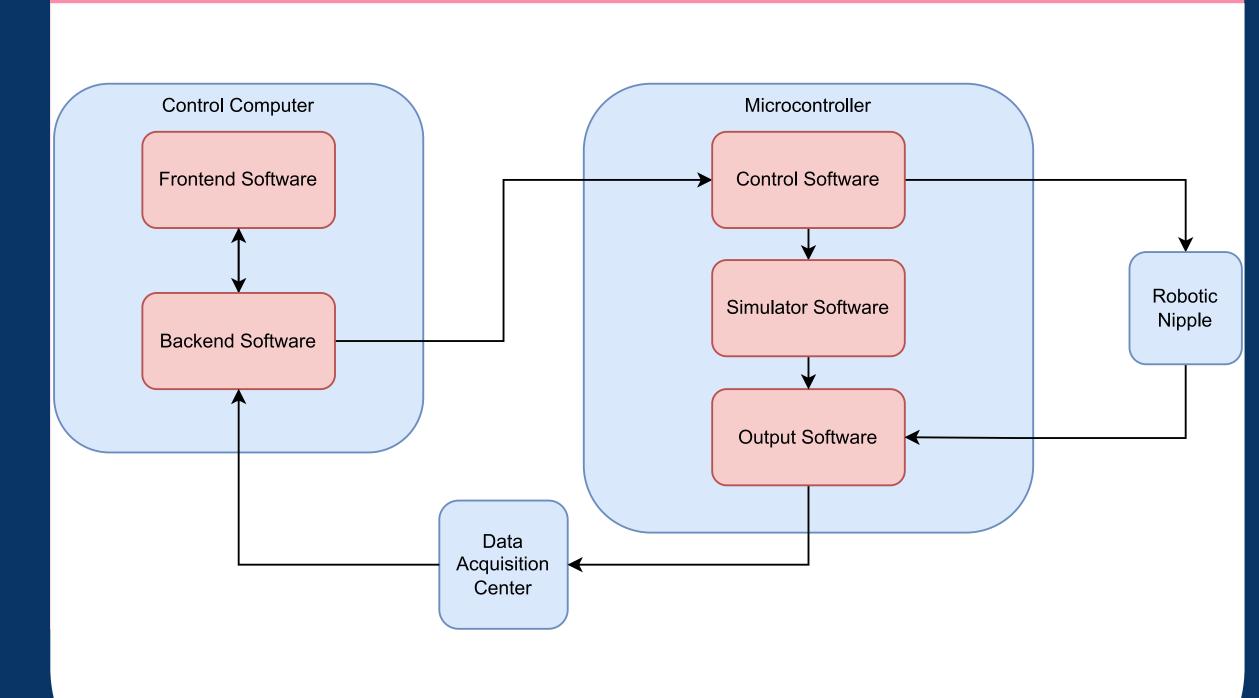
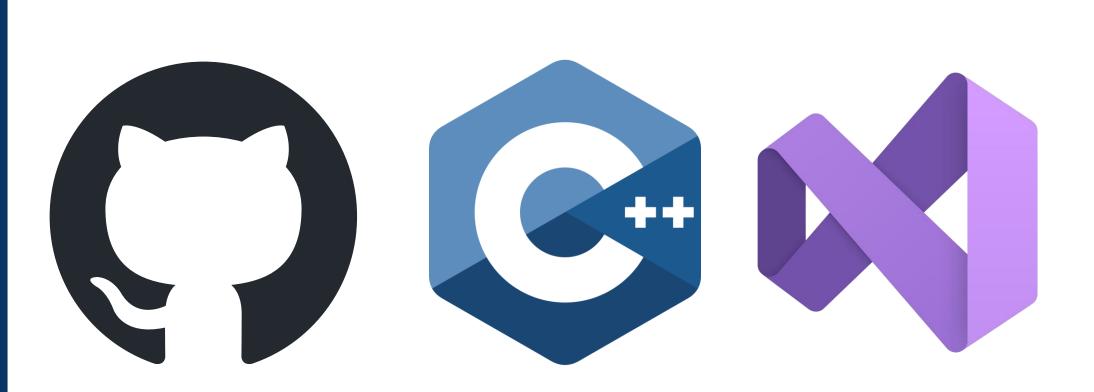


Figure 6: System Overview Diagram

Visit our Website:



Technologies









Challenges

- User Interface Design
- Develop Microprocessor and Back End code
- Integrate product with existing technology

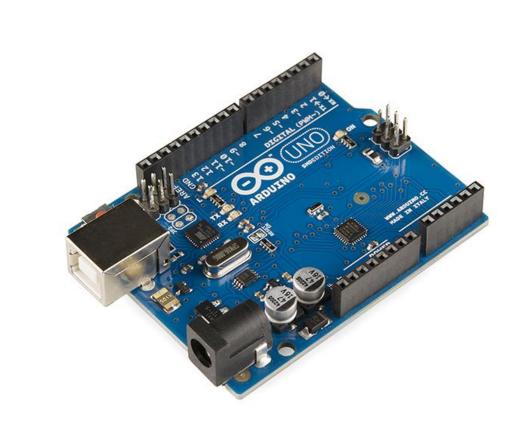


Figure 4: Arduino device

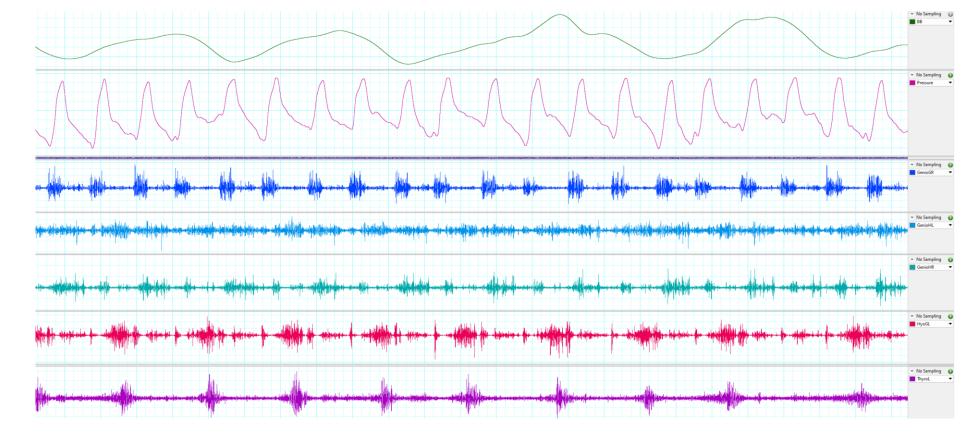


Figure 5: PowerLab output display

Next Steps

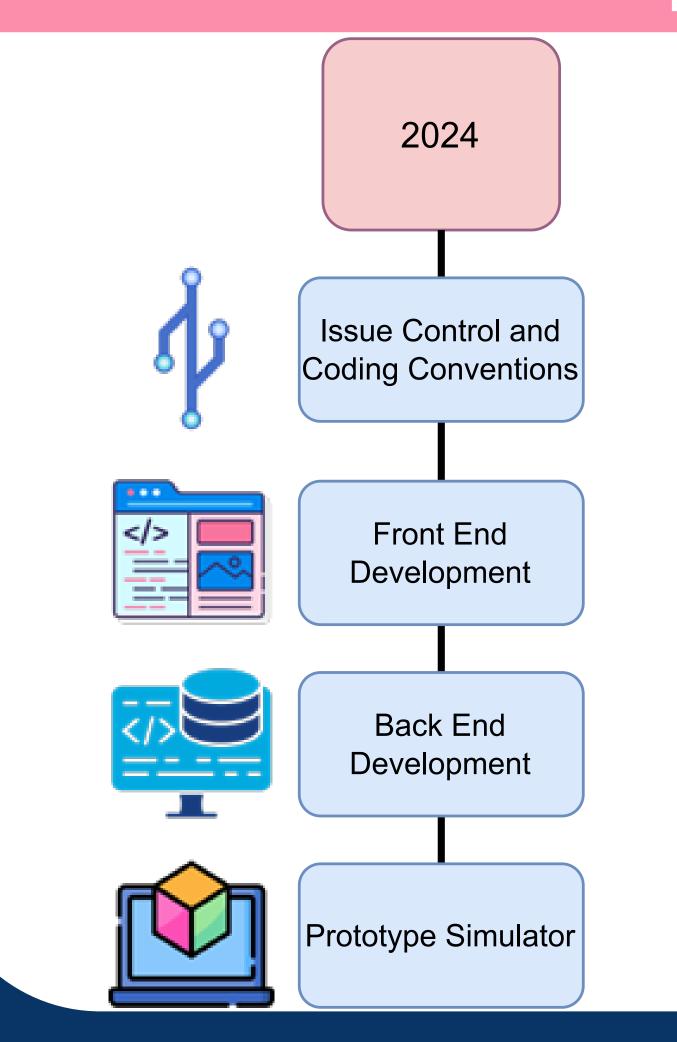


Figure 7:
Second
Semester
Timeline