↑ Aquadio / — Mechanical Design | 2018

Senior Thesis, MIT B.E Mech

Travis Libsack

Objectives

- **Design a product** by conducting market research, interviews, and trials
- Coordinate and with a team of 10 engineers across disciplines
- Complete mechanical design thesis for MIT MechE

Aquadio was organized like a start-up. We started with an idea following a product development process and honed our electrical, mechanical, software, and integration skills as a team to produce a final product.

It is designed to help competitive swim teams train smarter by providing real time information and feedback to coaches and swimmers.

Proof of Concept

First prototype/mock-up uses a lens and projector to display feedback to the user

Second prototype/mock-up uses a bone conducting speaker to transmit commands to the user



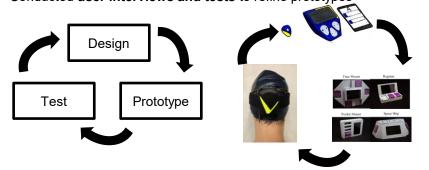






Approach

- We used the **design cycle** to refine out design across 3 prototypes
- Conducted user interviews and tests to refine prototypes



Results

Final product integrated across all disciplines and tested in the pool Completed design thesis and received an offer to continue research



