## **Ben Forbes**

(559)326-9331 | benforbes2023@u.northwestern.edu

#### **EDUCATION**

Northwestern University Anticipated Graduation: June 2023

Robert R. McCormick School of Engineering and Applied Science

Major: Mechanical Engineering GPA: 3.646

**Relevant Coursework:** Multivariable and Vector Calculus, Electronics Design, Mechanics of Materials, Differential Equations, Decision Science and Smart Technologies, Mechanical Design and Manufacturing, Introduction to Materials, Computer Integrated Manufacturing, Mechatronics, Public Speaking.

#### PROFESSIONAL EXPERIENCE

WAGIC, Inc.

June 2021 - September 2021

Product Design Engineer

Remote via Fresno, CA

- Reviewed and redesigned consumer products entering the American market.
- Utilized CAD systems to detail 3-D models into 2-D drawings for use in manufacturing.
- Researched and iterated designs that addressed the unmet needs of the client.

#### LEADERSHIP EXPERIENCE

## **Northwestern Swimming and Diving**

September 2019 - Present

Student-Athlete

Evanston, IL

- Devote 30+ hours per week to rigorous training, preparation and competition as a NCAA Division I athlete in the Big Ten Conference
- Practice compromise, conflict resolution and vocalize energy to foster a winning culture

# Northwestern Athletics Civic Engagement and Voter Registration Committee

August 2020 - Present

Founding Member

Evanston, IL

- Brainstormed social media campaigns to reach the athletic community about the importance of civil engagement, specifically related to the 2020 election
- Collaborated with Northwestern's Center for Civic Engagement and others to host Zoom events geared toward helping student-athletes register to vote
- Oversaw 12 of 19 athletic programs reach 100% voter registration

## **Student Athlete Advisory Committee**

August 2020 - Present

Executive Committee Member

Evanston, IL

- Selected as 1 of 5 representatives to serve as liaison between Northwestern's varsity sports teams and upper-level management in the athletic department
- Called upon to discuss and vote on pressing issues facing student-athletes on the university, Big Ten, and NCAA level
- Managed logistics of Northwestern Athletics' annual canned food drive benefitting Family Focus Evanston

## **COURSE PROJECTS**

## Design Thinking & Communication I, Client: Shirley Ryan Ability Lab

Fall, 2019

- Designed treadmill attachment to aid in gait therapy for patients at the Shirley Ryan Ability Lab
- Manufactured, tested, and revised design to better fit the needs of the patient
- Listened, understood and conceptualized the needs of client to inspire our product design

## Design Thinking & Communication II, Client: Temple of the Dog and Meow Lounge

Spring, 2020

- Collaborated with client and team members in virtual environment to discuss the project
- Analyzed challenges faced by client and refined design to decrease noise output of a high-velocity dog hair dryer
- Visualized solution with at-home testing and modeling through AutoCAD

## **SKILLS & HONORS**

**Skills:** Trained in drill press, band saw, CNC machining, injection molding, soldering, mill, and lathe. Experienced with MATLAB, CREO, SolidWorks, C, Python, NX, GD&T. Specialized in human-centered design. **Honors:** Academic All-Big Ten, United States Olympic Trials Qualifier, B'nai B'rith Student Athlete Award