# **JACK KOLB**

Email: jack@jackkolb.com
Website: https://jackkolb.com

## **EDUCATION**

• **Ph.D.** *Robotics* — *in progress* 

Aug 2020 - present

**Georgia Institute of Technology** 

Advisor: Sonia Chernova

• **B.S.** Mechanical Engineering (Honors)

Sept 2016 - June 2020

University of California at Riverside

Capstone Title: "An Autonomous Robot Capable of Scaling a Self-Built Structure"

# RESEARCH EXPERIENCE

• Graduate Research Assistant

Aug 2020 - present

Advisor: Sonia Chernova

Research Focus: Improving human-robot team performance by utilizing individual human traits.

Undergraduate Research Assistant

Apr 2018 - June 2020

Advisor: Sundararajan Venkatadriagaram

Research Focus: Predicting electric motor failure by analyzing motor vibrations.

#### WORK EXPERIENCE

• NextGen Assistive Technology

Cloud Developer

June 2020 - Sept 2020

- Transformed idea sketches for an in-home remote caregiving system into NextGen's flagship product, reaching hundreds of paying customers.
- Leveraged Microsoft Azure's Event Grid, Power Apps, and IOT Hub platforms.
- UC Riverside Autonomous Underwater Vehicles (UCR RoboSub)

Project Lead Aug 2018 - Aug 2020
Mechanical Lead Aug 2017 - Aug 2018
Mechanical Team Sept 2016 - Aug 2017

- Led 25+ members in the interdisciplinary development of two autonomous robot submarines.
- Researched and implemented systems for heading control, depth control, computer vision, autonomous mission control, object interaction, and 3D sandbox simulation.
- Competed in the international RoboSub competition (2017, 2018, 2019, 2020).
- Worked with university departments, corporate sponsors, and student organizations for funding, technical theory, logistics, and outreach to local youth communities.

## • UC Riverside Department of Residential Life

Resident Advisor

Sept 2018 - June 2020

- Managed a building of 75 students via mentorship, programming, and community building.
- On-call responder for fire, medical, mental, and safety crises in a  $\sim$ 1200 resident area.
- Peer-awarded MVP for both '18-19, and '19-20 years.