

Jack Kolb

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🐙 github.com/jackkolb

B.S. Honors Mechanical Engineering, UC Riverside
Focus on Robotics and Controls, 3.85 GPA

2016 – 2020

Certified Solidworks Associate, Mechanical Design

Work Experience

UCR Autonomous Underwater Vehicle

Large autonomous submarine competing annually in the international RoboSub competition

Mechanical Team

2016 – 2017

Designed and constructed the submarine's physical structure; created a modular electronics housing and a watertight but accessible central electronics chassis

Mechanical Lead

2017 – 2018

Led a team of 10+ engineers in developing torpedo systems, extending upon the center hull, developing various electrical housings and aesthetic components, presenting at outreach events, managing the project website and social media profiles; ensured no leaks for 50+ water runs

Project Lead

2018 – 2019

Currently managing the project, working with university department and student organizations for budgeting and support, communicating with corporate sponsors, ensuring deadlines and documentation are fulfilled and standardized, expanding the project into the premier student project at UCR

UCR Residential Life

Resident Advisor

2018 – 2019

Currently managing a residential building of 70+ first-years, planning and conducting student-centric programs, supporting students' mental health and academic performance, fulfilling auxiliary duties for residential communities

Project Experience

Littlebox

C++, Boost

🐙 /littlebox

File transfer server/client allowing users to push, pull, and delete files from a central server, includes both server and file passwords, protection from accessing outside the server directory, remote access to servers, and a simple command line interface

TinyRSA

C++, GMP

🐙 /tinyrsa

Easy-to-use, effective, well-documented, standalone header for RSA encryption/decryption

WiCon

Python, GTK3

🐙 /wicon

A simple, straightforward GUI WiFi manager for Linux distros, interfaces with wpa_supplicant and other default programs, allows connection to open/WPA2/WPA2-Enterprise networks, autoconnection to networks by strongest signal, and reconnection to saved networks

Quadmotion [HackIoT 2018]

Python, Raspberry Pi, Arduino

🐙 /quadmotion

Uses arrow keys or hand gestures to control a quadcopter from anywhere in the world

ElectionCat [Hacktech 2018]

Python, Flask

🐙 /electioncat

Web application for managing student organization elections, easily deployable and configurable

[see more projects at jackkolb.com]

Co-Curricular Involvement

- American Society of Mechanical Engineers** 2016 – present
Member of UCR’s ASME chapter, project liason for RoboSub, involved in general meetings and events, project lead meetings, hosted a quarter-long weekly workshop preparing first-year mechanical engineers for success in their “weed-out” course
- Institute of Electrical and Electronics Engineers** 2016 – present
Officer of UCR’s IEEE chapter, project coordinator for RoboSub, attended general meetings, events, and officer meetings, showcased IEEE at outreach events, conducted administrative duties for the organization
- Association of Computing Machinery** 2017 – present
Member of UCR’s ACM chapter, involved in general meetings, events, and workshops
- Cross Campus Entrepreneurs** 2016 – present
Member of UCR’s CCE chapter, involved in general meetings, events, and workshops
- National Residence Hall Honorary** 2016 – present
Member of UCR’s NRHH chapter, involved in general meetings and community service events
- Tau Beta Pi** 2017 – present