Jack Kolb

% jackkolb.com github.com/jackkolb 2016 - 2020 B.S. Honors Mechanical Engineering, UC Riverside Focus on Robotics and Controls, 3.85 GPA Certified Solidworks Associate, Mechanical Design **Work Experience UCR Autonomous Underwater Vehicle** Large autonomous submarine competing annually in the international RoboSub competition 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 central 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** 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 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 Uses arrow keys or hand gestures to control a quadcopter from anywhere in the world

Python, Flask

Web application for managing student organization elections, easily deployable and

• /electioncat

ElectionCat

[Hacktech 2018]

[see 10+ more projects at jackkolb.com]

configurable

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