# Getty George V

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#### **Education:**

UCLA Samueli School of Engineering, September 2020 - June 2024 (Expected) Mechanical Engineering Major, GPA: 3.90
Two time dean's honor list recipient (Winter and Spring 2021)

## **Experience / Activities:**

**Bruin Racing Baja,** *Electronically Controlled Transmission (ECVT)*, UCLA, October 2020 - Present Wrote new software in C++ to handle control of the transmission while ensuring code is maintainable for future years Recorded lessons to teach my teammates about version control with Github to increase the efficiency of coding as a team Learned about PID controllers and helped to implement and calibrate a PD controller in the control code for the ECVT Modeled sheave fixture using CAD and tested using finite element analysis before presenting and answering questions

American Computing Machinery teachLA, *Project Manager*, UCLA, October 2020 - Present Draft and refine timelines to ensure interactive website project is completed in a timely manner without need for crunch Organize developers and designers to work together effectively to avoid wasted time redoing the design or code Motivate team members to meet deadlines and inform board members about progress to ensure accountability

Provide input and ideas during content and design stages as well as to help with implementation in React and Javascript

### Engineering Ambassadors, UCLA, September 2020 - Present

Lead tours around the engineering department buildings to engage new and prospective students with the school Represent the college of engineering in events by engaging with alumni and donors and talking about my experiences

# **Projects:**

**BruinLabs Hackathon: Budgie** - *Hardware and connected app to teach musical students rhythm*Designed a physical product in CAD, using 3D printing to rapidly prototype, test, and improve the design over time Presented my designs and CAD renders to a panel of judges before answering questions about the product and process Worked closely in a team with electrical engineers and computer scientists to ensure the product worked with the app

### **Personal Project: MIDI Keyboard Transformation**

Disassembled and reverse-engineered an old keyboard to determine how the keys interface with the governing electronics Programmed an Arduino in C++ to utilize the keyboard's scan matrix to read user input and convert to a legal MIDI signal Kept a thorough engineering log complete with pictures, code, and assembly to document and better explain my process

**ACM teachLA: Machine Learning-** *Interactive site to teach college students about LSTMs, a machine learning model* Ideated with board members and other leaders on project ideas that would be relevant for our member students Organized a collaboration with a machine learning student group to build a robust curriculum covering all major topics Recruited and onboarded new members by teaching them how to use essential tools like GitHub and React

**IdeaHacks Hackathon: Waypoint Compass** - *Electronic compass that records and points back to specific locations* Created a detailed CAD model that utilized a print-in-place mechanism to make it easier to produce with 3D printing Worked closely with electronics team to ensure ample room and a firm mounting solution for wiring and other boards

#### **Skills:**

**Programs:** CAD (Solidworks, Fusion), Solidworks finite element analysis, GrabCad, Github, Excel, Powerpoint **Languages/Software:** Python, C++, JavaScript, TypeScript, React, HTML, CSS, Linux and Windows Command Line