David A. James

(661) 666-2009   github.com/DJ-2805

davidabraham@ucla.edu   linkedin.com/in/daj-2805/

Education	**University of California: Los Angeles, 2019** *Degrees:* B.S. Mathematics of Computation with a Minor in Geophysics and Planetary Physics *Organizations:* Hermanos Unidos; Triangle Fraternity for Engineers, Architects, and Scientists **College of the Canyons** GPA 3.55 *Degrees:* Associates in Mathematics, Assosciates in Physics

Skills	*Programming:* C/C++, Python, LaTeX, Matlab, JavaScript, Solidity *Applied Maths:* Mathematical Modeling, Numerical Methods, Optimization, Algorithms *Other:* Tutoring, Project Management, Staff Management, Public Speaking, Soldering, Milling, Machining, Lab experience, Microsoft Office	**Relevant Coursework**	Math 142: Mathematical Modeling Math 164: Optimization EPS SCI 136: Applied Geophysics EPS SCI 155: Planetary Physics EPS SCI 156: Space Plasma Physics Physics 110: Electricity and Magnetism ECE 188: Blockchain Technology

Project Experience	**Rapid: Blue Dawn CubeSat Mission – http://bruinspace.com/projects/rapid.html** *Title:* Assembly, Integration, & Testing Engineer June 2018 - Present *Project:* Team is developing a CubeSat that is launching on Blue Origin's New Shepard rocket *Skills Used:* Python, Arduino, Documentation Writing, Circuitry, Soldering • Write assembly, safe-to-mate, and functional procedures • Test procedures for errors and accuracy on design • Test magneto-hydrodynamic pump extensively to ensure design was safe to fly **Idea Hacks 2019 – https://github.com/DJ-2805/muscleBot** *Title:* Data Analyst January 2019 *Project:* Team designed RC Car that moved based off of hand motion and muscle detection *Skills Used:* Python, Arduino, Circuitry, Data Analysis • Calibrated muscle sensor to recognize EM pulses to turn on/off RC Car • Calibrated hand motion, so that accleration data would move the car in correct motion • Assisted in circuit design of RC Car and hookup of hardware to devices **LA Hacks 2018 – https://github.com/ryanmjacobs/4sk8** *Title:* Full Stack Developer March 2018 *Project:* Team developed an Arduino compass hooked up to a skateboard that would receive heading from external website *Skills Used:* JavaScript, Arduino, Circuitry • Designed back end of the website using JavaScript, so that Arduino received GPS coordinates • Designed simple front-end for the website using HTML, so that user could input destination • Assisted team members with design, so that it would gather data, and output an accurate heading

Work Experience	**UCLA: Institute of Transportation Studies** June 2018 - Present *Title:* IT Assistant • Built computers for the ITS Department • Setup network and connections along with cleaning machines for Lewis Department • Help maintain web servers • Troubleshoot any technical problems or tasks that arise within the department **College of the Canyons: MESA Center** September 2014 - Present *Title:* MESA Tutor/ Workshop Facilitator/ Math and Science Tutor • Assisted students in STEM homework and answered questions pertaining to theory they studied • Lead Academic Excellence Workshops in the MESA Center • Physics Academic Workshop showed a GPA increase of 0.2 with my students and an average of 1 letter grade increase over other students **High Pressure Technologies LLC** May 2011 - July 2011 *Title:* Machine Shop Intern • Assisted machinist with pressure system repair • Tested pressure systems at external locations to ensure safety and upkeep • Machined fittings for pressure systems

Leadership Experience	**UCLA CalGeo** *Community Service Chair* Fall 2017-Spring 2018 • Planned community service events • Planned public outreach events **Astronomy and Physics Club** *President* Fall 2015-Spring 2018 • Started and manged club events • Wrote budget proposals	**Clubs/ Interests**	California Geotechnical Engineering Association [CalGeo] Muay Thai Salsa Club