

# David A. James

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<b>Education</b>	<b>University of California: Los Angeles</b> <i>Degrees:</i> B.S. Mathematics of Computation, Geophysics and Planetary Physics Minor Hermanos Unidos; Triangle Fraternity for Engineers, Architects, and Scientists <b>College of the Canyons</b> <i>Degrees:</i> Associates in Mathematics, Associates in Physics		
<b>Skills</b>	<i>Programming:</i> C++, Python, JAVA $\LaTeX$ , Matlab <i>Applied Maths:</i> Mathematical Modeling, Numerical Analysis, Optimization <i>Other:</i> Tutoring, Project Management, Staff Management, Public Speaking, Soldering, Milling, Machining, Lab experience, Microsoft Office	<b>Relevant Coursework</b>	Math 142: Mathematical Modeling Math 164: Optimization EPS SCI 136: Applied Geophysics Physics 105: Mechanics Physics 110: Electricity and Magnetism CS 31: Computer Science I CS 32: Computer Science II
<b>Research Experience</b>	<b>DataFest 2017</b> <i>Title:</i> Data Analysis May 2017 <i>Project:</i> Team developed a machine learning algorithm to determine purchase pattern of algorithms <ul style="list-style-type: none"> <li>• Extracted data, so that team can work with smaller sets</li> <li>• Analyzed data via matrices to confirm machine algorithm was accurate</li> <li>• Created presentation to present results to audience and judges</li> </ul> <b>NASA High Altitude Student Platform: Electrostatic Cosmic Dust Collector [ECDC]</b> <i>Title:</i> Systems Engineer Fall 2016 - Fall 2017 <i>Project:</i> Team developed an optimized device to place on the HASP to collect particles from celestial showers. <ul style="list-style-type: none"> <li>• Researched corona discharge to optimize the electrostatic dust collection</li> </ul> <b>NASA High Altitude Student Platform: Electrostatic Cosmic Dust Collector [ECDC]</b> <i>Title:</i> Systems Engineer Fall 2015 - Fall 2016 <i>Project:</i> Team developed a device to place on the HASP to collect particles from celestial showers. <ul style="list-style-type: none"> <li>• Modelled systems and possible scenarios the ECDC will go through during flight, so that the team would know design requirements</li> </ul> <b>College of the Canyons Fair: Sonoluminescence</b> <i>Title:</i> Researcher and Analyst Fall 2013 - Spring 2014 <i>Project:</i> Team constructed an apparatus to display the sonoluminescence phenomena. <ul style="list-style-type: none"> <li>• Researched sonoluminescence</li> <li>• Constructed the apparatus by soldering a circuit together</li> </ul>		
<b>Work Experience</b>	<b>College of the Canyons</b> September 2014 - June 2016 <i>Title:</i> MESA Tutor/ Workshop Facilitator/ Math and Science Tutor <ul style="list-style-type: none"> <li>• Assisted students in mathematical or scientific homework or questions</li> <li>• Lead Academic Excellence Workshops in the MESA Center</li> </ul> <b>Gentle Ride Ambulance</b> May 2014 - Decemeber 2014 <i>Title:</i> EMT-B <ul style="list-style-type: none"> <li>• Patient care such as vitals, assessments, medical interventions</li> <li>• Giving and taking medical history reports</li> </ul> <b>Papa John's Pizza</b> May 2013 - April 2014 <i>Title:</i> Assistant Manager <ul style="list-style-type: none"> <li>• Took orders and ran register in the store</li> <li>• Surveyed systems at other businesses</li> <li>• Closing the restaurant and stock counting</li> </ul> <b>High Pressure Technologies LLC</b> May 2011 - July 2011 <i>Title:</i> Machine Shop Intern <ul style="list-style-type: none"> <li>• Assisted machinist with pressure system repair</li> <li>• Surveyed systems at other businesses</li> <li>• Learned machining and workshop environment</li> </ul>		
<b>Leadership Experience</b>	<b>UCLA CalGeo</b> <i>Community Service Chair</i> Fall 2017-Spring 2018 <ul style="list-style-type: none"> <li>• Planned community service events</li> <li>• Planned public outreach events</li> </ul> <b>Astronomy and Physics Club</b> <i>President</i> Fall 2015-Spring 2018 <ul style="list-style-type: none"> <li>• Started and manged club events</li> <li>• Wrote budget proposals</li> </ul>	<b>Clubs/ Interests</b>	California Geotechnical Engineering Association [CalGeo] BruinSpace Society of Physics Students [SPS] American Physical Society [APS] American Chemical Society [ACS] Mathematics, Engineering, Science Achievment [MESA] Salsa Club