

# JEREMY J. KELLER

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## EDUCATION

<b>University of Denver, Daniel Felix Ritchie School of Engineering and Computer Science (ABET)</b>	<b>Denver, CO</b>
<ul style="list-style-type: none"><li>• <b>BS in Computer Science</b></li><li>• <b>Cumulative GPA: 3.81</b>      <b>Major GPA: 3.81</b></li><li>• <b>Relevant Coursework:</b> Programming in Java, C, and C++; Artificial Intelligence; Parallel and Distributive Computing; Database Management; Software Tools</li><li>• <b>Minors:</b> Mathematics and Business Administration</li></ul>	<i>Expected Nov 2017</i>

## PROFESSIONAL EXPERIENCE

<b>Center for Orthopaedic Biomechanics</b>	<b>University of Denver</b>
<ul style="list-style-type: none"><li>• Write algorithms to process and analyze biomechanical data</li><li>• Develop software to be used in clinical scenarios</li></ul>	<i>June 2017 – Present</i>
<b>Rackfest   Connecting Fans to Celebrities</b>	<b>Denver, CO</b>
<ul style="list-style-type: none"><li>• Worked as a web development intern utilizing the Magento eCommerce Platform</li></ul>	<i>March – April 2017</i>
<b>COSY Robotics</b>	<b>Philadelphia, PA</b>
<ul style="list-style-type: none"><li>• A commercial application of the ARCHE Research Group in a startup environment</li><li>• Developed scout robots to use artificial intelligence and machine vision to navigate</li></ul>	<i>June – August 2016</i>
<b>Unite-SMP Robotics</b>	<b>University of Pennsylvania</b>
<ul style="list-style-type: none"><li>• A four-week, Army sponsored course for disadvantaged high school students</li><li>• Instructed and mentored 18 students on the introductory aspects of Programming, electrical and mechanical engineering, and mechanical design</li></ul>	<b>GRASP Lab</b> <i>July 2016</i>
<b>ARCHE Research Group</b>	<b>University of Pennsylvania</b>
<ul style="list-style-type: none"><li>• Autonomous Robots in Complex Human Environments</li><li>• Designed and built an unmanned airship platform from scratch</li></ul>	<b>GRASP Lab</b> <i>June 2015 – March 2016</i>

## NOTABLE PROJECTS

<b>Kinect Joint Kinematic and Biomechanical Gait Analysis</b>	<i>June 2017 - Present</i>
<ul style="list-style-type: none"><li>• A C++ application which utilizes the Microsoft Kinect v2 sensor to analyze gait motion of a patient. It uses Microsoft libraries to control the Kinect, then multiple algorithms and functions written from scratch to process raw joint data, find gait imbalances, and output the results cleanly.</li></ul>	
<b>GPS Route Planning Application</b>	<i>April – June 2015</i>
<ul style="list-style-type: none"><li>• A Java based application which finds local business and attractions along a driving route according to the user's search query. It calls multiple APIs to handle geocoding, geolocation, routing and local business searches. It utilizes elements from Google Maps, Graph Hopper, Open Street Maps and Open Layers.</li></ul>	

## LEADERSHIP

<b>National Outdoor Leadership School (NOLS), Rocky Mountain Branch</b>	<b>Lander, WY</b>
<ul style="list-style-type: none"><li>• Formal training and experience in risk management and multiple leadership disciplines</li></ul>	

## SKILLS & INTERESTS

**Coding Languages:** Assembly, C, C++, CSS, HTML, Java, JavaScript, R, Scheme, and Shell Scripting  
**Experience with:** ArcGIS, Arduino, CAD (Solidworks) and 3D Printing, Git and Subversion, Hadoop, and Linux  
**Interests:** Data Management, Software Development, GIS Mapping, Robotics and Artificial Intelligence  
**Hobbies:** Mountaineering, skiing, trail running, and rock climbing