JEREMY J. KELLER

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EDUCATION

University of Denver, *Daniel Felix Ritchie School of Engineering and Computer Science (ABET)* **Denver, CO**

- **BS in Computer Science** *Expected Nov 2017*
- **Cumulative GPA:** *3.81* **Major GPA:** *3.81*
- **Relevant Coursework:** Programming in Java, C, and C++; Algorithms and Data Structures; Artificial Intelligence; Computer Organization; Database Management; Discrete Structures; Embedded Systems; Operating Systems; Parallel and Distributed Computing; Software Tools; Systems Programming; World Wide Web Development
- **Minors:** Mathematics and Business Administration

PROFESSIONAL EXPERIENCE

Center for Orthopaedic Biomechanics **University of Denver**

- Write algorithms to process and analyze biomechanical data *June 2017 – Present*
- Develop software to be used in clinical scenarios

Rackfest | Connecting Fans to Celebrities **Denver, CO**

- Worked as a web development intern utilizing the Magento eCommerce Platform *March – April 2017*

COSY Robotics **Philadelphia, PA**

- A commercial application of the ARCHE Research Group in a startup environment *June – August 2016*
- Developed scout robots to use artificial intelligence and machine vision to navigate

Unite-SMP Robotics **University of Pennsylvania**

- A four-week, Army sponsored course for disadvantaged high school students **GRASP Lab**
- Instructed and mentored 18 students on the introductory aspects of Programming, electrical and mechanical engineering, and mechanical design *July 2016*

ARCHE Research Group **University of Pennsylvania**

- Autonomous Robots in Complex Human Environments **GRASP Lab**
- Designed and built an unmanned airship platform from scratch *June 2015 – March 2016*

NOTABLE PROJECTS

Kinect Joint Kinematic and Biomechanical Gait Analysis *June 2017 - Present*

- 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.

GPS Route Planning Application *April – June 2015*

- 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.

LEADERSHIP

National Outdoor Leadership School (NOLS), *Rocky Mountain Branch* **Lander, WY**

- Formal training and experience in risk management and multiple leadership disciplines

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