

# Jeff Andrew Hawks Biography with Work Experience

Engineering Project Manager at Metal-Tech Partners

Beatrice, NE, USA [be.net/jeff-andrew-hawks](http://be.net/jeff-andrew-hawks)



## Jeff Andrew Hawks

Jeff is currently spearheading notable projects in robotic development, fabrication automation, and product design.

### Integrating Innovation with Perpetual Education

Jeff Andrew Hawks, an esteemed Engineering Project Manager, has intricately woven innovation and constant learning into his career fabric. His pronounced focus on the realms of robotic development, automation, and biomechanics showcases his deep-rooted passion for merging physiological concepts with engineering principles.

### Leading the Charge in Robotic Development and Automation

Jeff is at the forefront of significant projects in robotic development, fabrication automation, and product design. His expertise is broad, encompassing the development of robotic arms for various applications like welding and material handling and the design of mechatronic systems to refine the fabrication process. A standout achievement in his innovative journey is the development of a hip sled prototype designed to assist patients with Multiple Sclerosis, which the research community has warmly received.

### Scholastic Excellence and Educational Leadership

Holding a Ph.D. and Master's degree in Mechanical Engineering, his career is distinguished by a plethora of significant journal publications, book chapters, and patents. His dedication to continuous learning is mirrored in his educational contributions. He has taught the senior capstone design course at the University Of Nebraska-Lincoln's

Mechanical and Materials Engineering Department and initiated an interdisciplinary course in biomechanics, benefiting a wide range of students.



## Jeff Andrew Hawks

His keen emphasis on robotic development, automation, and biomechanics reflects a fervent fascination with blending the fields of physiology and engineering mechanics.

**Pioneering in Biomechanics and Sports Science**

Jeff Hawks's commitment to continuous development is evident in his deep involvement in biomechanics and sports science research, particularly in designing assistive rehabilitation devices. His collaborative work with the Nebraska Biomechanics Core Facility at the University of Nebraska-Omaha and the Nebraska Athletic Performance Laboratory at the University of Nebraska-Lincoln highlights his comprehensive approach. In 2013, he played a pivotal role on the host planning committee for the American Society of Biomechanics conference in Omaha, NE.

### **Philanthropic Work: Supporting Rehabilitation for MS Patients**

Hawks's innovative mindset is not only evident in his professional achievements but also in his philanthropic endeavors, particularly in aiding MS patients. He is an active board member of MS Forward, a nationally recognized gym for people with neurological diseases, where he contributes his expertise and resources to enhance their rehabilitation programs. His charitable nature also extends to his support for Christian Heritage.



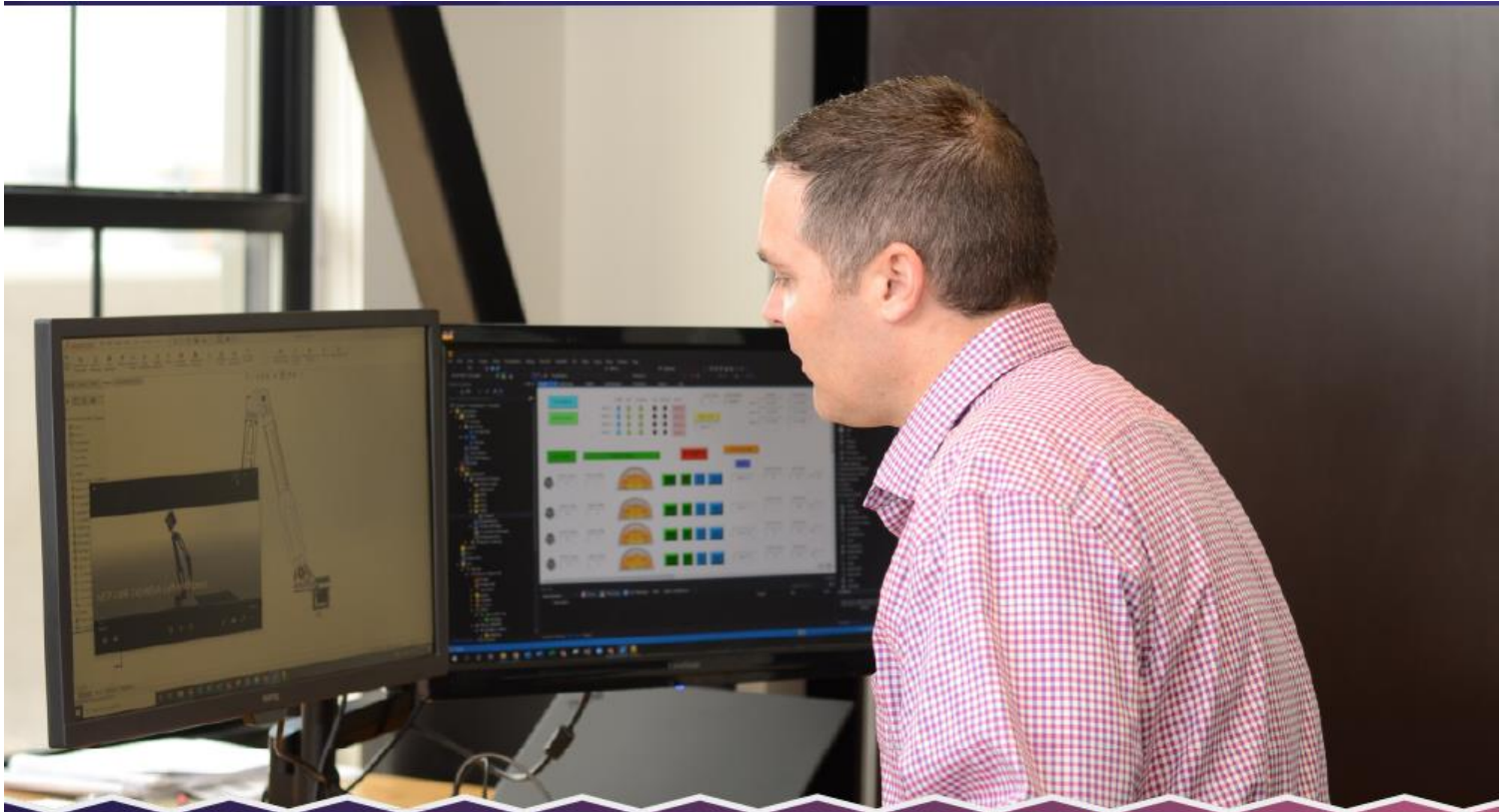
### **Significant Role at Army Research Laboratories**

His tenure at the Army Research Laboratories marks a significant phase in his career. There, he managed a range of innovative projects in autonomous cooperative robot systems, computer vision, miniature surgical robotics, wheeled robotics, and autonomous sensor platforms. These contributions underscore his allegiance to innovation and lifelong learning.

### **The Essence of His Success: Innovation and Continuous Learning**

The driving forces behind Jeff Andrew Hawks's success are his steadfast commitment to innovation and his passion for continuous learning. His creative spirit is at the core of developing advanced biomechanical devices and surgical

aids. His dedication to education is demonstrated by his continued academic endeavors and his eagerness to impart knowledge to future engineers and scientists.



## Jeff Andrew Hawks

Leveraging his professional expertise and industry networks, he donates valuable time and resources to the non-profit, infusing his innovative spirit in their rehabilitation efforts.

**Future Goals: Advancing Robotics and Biomechanics**

Jeff is poised to continue making significant strides in his research and development within the fields of robotics and biomechanics. His commitment is set to have a profound impact on both his professional pursuits and his humanitarian efforts.

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#### WORK EXPERIENCE

##### **Metal-Tech Partners**

Engineering Project Manager

Production management; Robotics Integration; Controller

Project Planning, Supply Chain Optimization, Robotic Welding, Process Automation

February 2016 - Present | Beatrice, Nebraska, United States

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##### **University Of Nebraska-Lincoln**

Research Assistant Professor

Taught Biomechanics, Robotics, Senior Design, Mechatronics.

Research in biomedical engineering, surgical robotics, sports science and biomechanics, autonomous cooperative systems, industry automation and computer vision.

Biomedical Engineering, Sports Biomechanics, Mobile Robotics, Robotic Surgery, Biomechanics

January 2011 - January 2016 | Lincoln, Nebraska, United States

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#### EDUCATION

University of Nebraska-Lincoln

Doctor of Philosophy - PhD in Mechanical Engineering

December 2010 | Lincoln, Nebraska, United States