



Student Assistant I – BioFrontiers Institute

Job Summary

We are encouraging applications for a Student Assistant to assist in Associate Professor Peleg's lab.

The Lab is looking for a highly motivated candidate with experience in high-performance computing, AI, and Machine Learning algorithms. The Peleg Lab is located within the BioFrontiers Institute, and seeks to understand the behavior of disordered living systems by merging tools from physics, biology, engineering, and computer science, with a focus on honeybee communication (mechanical and chemical). Further information on the Peleg Lab can be found here: <https://www.colorado.edu/biofrontiers/peleg-lab>

Who We Are

At the University of Colorado BioFrontiers Institute, researchers from the life sciences, physical sciences, computer science, and engineering are working together to uncover new knowledge at the frontiers of science and partnering with industry to transform their discoveries into new tools. The Institute integrates faculty members from eleven academic departments, allowing them to work across fields. BioFrontiers drives innovation without boundaries.

What Your Key Responsibility Will Be

- Help maintain the apiary, which may include feeding bees, moving hives, mite monitoring and treatment, record keeping, and more. This involves proximity to and handling of live honeybees.
- Data collection, which involves taking photos of honeycomb frames, organization of data, and timely/accurate documentation.
- Collaborate with other students and research assistants to discuss progress, divide labor and responsibilities, and generate new ideas.
- AI/ML research and development to build a model for identifying and tracking honeybees in video data using current computer vision methods.
- Contributing to academic paper writing, as applicable.
- Other duties as assigned.

What You Should Know

We are located in the Jennie Smoly Caruthers Biotechnology Building (JSCBB) on East Campus.

This position is not expected to continue beyond August 16, 2025.

Position is in-person with some duties which can be remote.

What We Can Offer

\$17 per hour

What You Will Need

- Bachelor's degree in related field (Computer Science, Physics, Math, etc.).
- Willingness to work with live insects.
- Ability to lift up to 50 lbs.
- Proficiency in Python/MATLAB.
- Experience with high-performance computing, AI, and Machine Learning algorithms.
- Interest and curiosity in applying computational methods to biological systems.

Application Instructions

Please email your resume and cover letter to kristen.p.smith@colorado.edu.