

7:45 am **Registration**
Continental Breakfast

Main International Ballroom

8:30 am **Welcome**

Main International Ballroom

Chris Nomura
Vice President for Research and Economic Development
University of Idaho

Barrie Robison
Professor and Director
Institute for Interdisciplinary Data Sciences - University of Idaho

Research Talks

Main International Ballroom

- 8:45 am** • *“Ethical AI: How will cybersecurity education benefit from moral reasoning?”*
Ran Hinrichs - PhD Student - Dept of Movement Sciences
College of Education, Health & Human Sciences at U of I
- 9:00 am** • *“Generative AI for Healthcare”*
Min Xian - Associate Professor
Dept of Computer Science
College of Engineering at U of I
- 9:15 am** • *“Bicycle, Pedestrian, and Car Traffic Monitoring using Computer Vision: A comparison of proprietary CV sensors and custom CV development”*
Michael Lowry - Associate Professor
Dept of Civil and Environmental Engineering
College of Engineering at U of I
- 9:30 am** • *“Opportunities in AI for Camera Traps and Wildlife Management”*
Casey Brown - Wildlife Biologist
Oregon Department of Fish & Wildlife
- 9:45 am** —•— **BREAK**
- 10:00 am** • *“Travels from the Edge to the Core: Resources to Accelerate your Research with AI”*
Luke Sheneman
Director of Research Computing and Data Services
Institute for Interdisciplinary Data Sciences at U of I
- 10:45 am** • *“Machine vision priorities supporting our new smart forestry initiative on the University of Idaho Experimental Forest”*
Robert Keefe - Associate Professor
Dept of Forest, Rangeland and Fire Sciences
Director - University of Idaho Experimental Forest
College of Natural Resources at U of I

11:00 am Lunch

Main International Ballroom

11:30 am Keynote Address

Main International Ballroom



*“Open Challenges in Generalizable
Computer Vision for Ecology”*

Sara Beery

Assistant Professor

Artificial Intelligence and Decision-Making at MIT

12:30 pm ————— **BREAK**

1:00 - 2:30 pm

Breakout Session 1

Various Locations

Topic 1

Main International Ballroom

Remote Sensing for Agriculture and Earth Sciences

1:05 pm ————— *“Applying a Computer Vision Paradigm to Classification of
Drone Aerial Imagery”*

Jason Karl - Associate Professor and
Endowed Chair of Rangeland Ecology
College of Natural Resources at U of I

1:20 pm ————— *“Exploring computer vision and AI for orthorectifying
historical aerial imagery”*

Bruce Godfrey - GIS Librarian
Research and Experiential Learning at U of I

1:40 pm ————— *“Advance multimodal imaging and AI for smart agriculture”*
Johnny Li - Assistant Professor
Precision Agriculture and Intelligent Robotics
College of Agricultural and Life Sciences at U of I

2:00 pm ————— *“Interactive segmentation in aerial images: a new benchmark
and a web-based tool”*
Zhe Wang - Postdoctoral Fellow
Dept of Computer Science
College of Engineering at U of I

Topic 2

East Breakout

Object detection and recognition: Applications in robotics, autonomous vehicles, public safety, retail commerce, transportation systems, and more

1:05 pm

“Vision Transformers for Breast Cancer Early Detection”
Min Xian - Associate Professor - Dept of Computer Science
College of Engineering at U of I

1:30 pm

“Customizing YOLOv8 Computer Vision to Monitor Roadway Traffic”
Matthew Thompson - Graduate Student
College of Engineering at U of I

1:55 pm

“Object Detection with Multimodal Large Language Models”
Boyu Zhang - Assistant Professor - Dept of Computer Science
College of Engineering at U of I

Topic 3

West Breakout

Primer for Computer Vision Beginners

Barrie Robison - Professor and Director
Institute for Interdisciplinary Data Sciences at U of I

Terence Soule - Professor and Dept Chair
Dept of Computer Science, College of Engineering at U of I

1:05 pm

Introduction

Basics of Computer Vision

Dive into AI: Neural Networks and Deep Learning

Current Capabilities of Computer Vision

Challenges and Ethical Considerations

The Future and Horizon

Q&A and Discussion



Find the Computer Vision
Primer Website Here

2:30 pm

BREAK

Topic 1*Main International Ballroom*

2:50 pm

Facilitated Discussion by Keynote Speaker:
AI and Computer Vision for conservation, ecology, and natural resources

Panel Members

Sara Beery - Assistant Professor

Artificial Intelligence and Decision-Making at MIT

Casey Brown - Wildlife Biologist

Oregon Department of Fish & Wildlife

Sarah Thompson - Biometrician

Idaho Fish & Game

Lisette Waits - Distinguished Professor of Wildlife Sciences
College of Natural Resources at U of I

Topic 2*East Breakout***Microscopy and Biomedical Imaging**

2:50 pm

"Intelligent Cell Imaging"

Andreas Vasdekis - Associate Professor - Dept of Physics
College of Science at U of I

3:10 pm

**"Quantification of Intrathecal Contrast Agent Pharmacokinetics
in Non-Human Primates using Dynamic Contrast Enhanced
(DCE) MRI"**

Stuart Sater - Research and Development Engineer
Alcyone Therapeutics, Inc.

3:30 pm

**"Unraveling Lung Cancer Survival Via Attention-Based Deep
Learning with Histopathology Images"**

Isis Diaz - Graduate Student
University of Oregon

3:50 pm

"Label-free Imaging in Tissue"

Jinming Zhang - Graduate Student - Dept of Physics
College of Science at U of I

4:20 pm

Closing Remarks*Main International Ballroom**Informal Networking Session*