

# Connor Greenwell

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## Education

**Ph.D., Computer Science** 2016–2022

University of Kentucky; Lexington, KY

Advisor: Nathan Jacobs

Dissertation title: "Image Geo-localization with Cross-Attention"

**B.S., Computer Science & Mathematics** 2011–2016

University of Kentucky; Lexington, KY

## Appointments

**Senior Research Scientist** 2022–Present

Computer Vision Group

Kitware, Inc.; Clifton Park, NY

**Graduate Research Assistant** 2016–2022

Multimodal Vision Research Laboratory

University of Kentucky; Lexington, KY

**Research and Development Intern** Summer 2021

Computer Vision Group

Kitware, Inc.; Clifton Park, NY

**ASTRO Graduate Student Researcher at ORNL** Summer 2019

National Security Emerging Technologies Division

Oak Ridge Institute for Science and Education (ORISE); Oak Ridge, TN

*Advanced Short-Term Research Opportunity (ASTRO) Program*

**Undergraduate Research Assistant** 2014–2016

University of Kentucky; Lexington, KY

**Visiting Undergraduate Research Assistant** Summer 2014

University of North Carolina at Charlotte; Charlotte, NC

*NSF Research Experience for Undergraduates Program*

## Publications

(For the most up-to-date list, see my [Google Scholar page](#))

Greenwell, Connor. "Image Geo-localization with Cross-Attention". PhD thesis.  
University of Kentucky, 2022.

- Brodie, Benjamin, Subash Khanal, Muhammad Usman Rafique, Connor Greenwell, and Nathan Jacobs. "Hierarchical Probabilistic Embeddings for Multi-View Image Classification". In: *2021 IEEE International Geoscience and Remote Sensing Symposium IGARSS*. 2021.
- Liang, Gongbo, Connor Greenwell, Yu Zhang, Xin Xing, Xiaoqin Wang, Ramakanth Kavuluru, and Nathan Jacobs. "Contrastive cross-modal pre-training: A general strategy for small sample medical imaging". In: *IEEE Journal of Biomedical and Health Informatics* (2021).
- Blanton, Hunter, Connor Greenwell, Scott Workman, and Nathan Jacobs. "Extending Absolute Pose Regression to Multiple Scenes". In: *Joint Workshop on Long-Term Visual Localization, Visual Odometry and Geometric and Learning-based SLAM (CVPR Workshop)*. 2020.
- Workman, Scott, M. Usman Rafique, Hunter Blanton, Connor Greenwell, and Nathan Jacobs. "Single Image Cloud Detection via Multi-Image Fusion". In: *IEEE International Geoscience and Remote Sensing Symposium (IGARSS)*. 2020.
- Greenwell, Connor, Scott Workman, and Nathan Jacobs. "Implicit Land Use Mapping Using Social Media Imagery". In: *IEEE Applied Imagery and Pattern Recognition (AIPR)*. 2019.
- Salem, Tawfiq, Connor Greenwell, Hunter Blanton, and Nathan Jacobs. "Learning to Map Nearly Anything". In: *IEEE International Geoscience and Remote Sensing Symposium (IGARSS)*. 2019.
- Greenwell, Connor, Scott Workman, and Nathan Jacobs. "What Goes Where: Predicting Object Distributions From Above". In: *IEEE International Geoscience and Remote Sensing Symposium (IGARSS)*. 2018.
- Zhai, Menghua, Tawfiq Salem, Connor Greenwell, Scott Workman, Robert Pless, and Nathan Jacobs. "Learning Geo-Temporal Image Features". In: *British Machine Vision Conference (BMVC)*. 2018.
- Baltenberger, Ryan, Menghua Zhai, Connor Greenwell, Scott Workman, and Nathan Jacobs. "A Fast Method for Estimating Transient Scene Attributes". In: *IEEE Winter Conference on Applications of Computer Vision (WACV)*. 2016.
- Islam, Mohammad T, Connor Greenwell, Richard Souvenir, and Nathan Jacobs. "Large-Scale Geo-Facial Image Analysis". In: *EURASIP Journal on Image and Video Processing* (2015).
- Workman, Scott, Connor Greenwell, Menghua Zhai, Ryan Baltenberger, and Nathan Jacobs. "DeepFocal: A Method for Direct Focal Length Estimation". In: *International Conference on Image Processing*. 2015.
- Greenwell, Connor, Scott Spurlock, Richard Souvenir, and Nathan Jacobs. "GeoFaceExplorer: Exploring the Geo-Dependence of Facial Attributes". In: *ACM SIGSPATIAL International Workshop on Crowdsourced and Volunteered Geographic Information (GEOCROWD)*. 2014.

## Talks

**Implicit Land Use Mapping Through Geotagged Imagery** October 15-17, 2019. IEEE Applied Imagery and Pattern Recognition Workshop.

**GeoFaceExplorer: Exploring the Geo-Dependence of Facial Attributes** November, 2014. ACM SIGSPATIAL International Workshop on Crowdsourced and Volunteered Geographic Information (GEOCROWD).

## Reviewing

**IEEE/CVF Conference on Computer Vision and Pattern Recognition** 2019–22

**IEEE Winter Conference on Applications of Computer Vision** 2019–22

**EarthVision: Large Scale Computer Vision for Remote Sensing Imagery** 2021–22

**ISPRS Journal of Photogrammetry and Remote Sensing** 2020–21

**AAAI Conference on Artificial Intelligence** 2021

**British Machine Vision Conference** 2020

## Organizations

**ACM** 2011–Present

**IEEE** 2012–Present

**University of Kentucky Student Chapter, ACM** 2011–2015

Treasurer (2012–2013), President (2013–2014), Vice President (2014–2015)