

## EDUCATION

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### University of Illinois

*Ph.D. in Computer Science*

Advisor: Svetlana Lazebnik

Committee: David Forsyth, Derek Hoiem, Joseph Tighe, Svetlana Lazebnik

Urbana, IL

*Aug. 2017 – Present*

### Duke University

*B.S. in Computer Science, B.S. in Mathematics; magna cum laude*

Durham, NC

*Aug. 2013 – May. 2017*

## RESEARCH EXPERIENCE

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### Adobe

*Research Science Intern, Creative Intelligence Lab*

**Mentors:** Bryan Russell, Justin Salamon, Josef Sivic

- Project on text-guided automatic music recommendation for video

### Amazon

*Applied Science Intern, Amazon AI*

**Mentors:** Bing Shuai, Davide Modolo, Joseph Tighe

- Project on occlusion handling in multi-object tracking

*Applied Science Intern, Amazon AI*

- Research focused on multi-object tracking from unlabeled or weakly-labeled data

*Applied Science Intern, Amazon AI*

- Research on unsupervised learning in video for visual correspondence

### A9.com

*Applied Science Intern, Visual Search*

**Mentors:** Sunaad Nataraju, Doug Gray

- Project aimed at improving image representation learning using hyperbolic embeddings

### Duke Humans and Autonomy Lab

*Research Assistant*

**Mentor:** Alexander Stimpson

- Created predictive models using dataset of geographic movements collected from elephants in Gabon

Seattle, WA

*Feb. 2021 - Sept. 2021*

*Summer 2020*

*Summer 2019*

Palo Alto, CA

*Summer 2018*

Durham, NC

*Spring 2016 - Spring 2017*

## PUBLICATIONS

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### Language-Guided Music Video via Prompt Analogies

[Coming soon!]

**D. McKee**, J. Salamon, J. Sivic, B. Russell

*In submission*

### Robust Online Video Instance Segmentation with Track Queries

[Project | ArXiv]

Z. Zhan, **D. McKee**, S. Lazebnik

*In submission*

### Transfer of Representations to Video Label Propagation: Implementation Factors Matter

[ArXiv]

**D. McKee**, B. Shuai, D. Modolo, J. Tighe, S. Lazebnik

*In submission*

### Multi-Object Tracking with Hallucinated and Unlabeled Videos

[Project | ArXiv]

**D. McKee**, B. Shuai, A. Berneshawi, M. Wang, D. Modolo, S. Lazebnik, J. Tighe

*Presented at CVPR 2021 Workshop on Learning from Unlabeled Videos* [Link]

# Dressing in Order: Recurrent Person Image Generation for Pose Transfer, Virtual Try-on and Outfit Editing

[Project | ArXiv]

A. Cui, D. McKee, S. Lazebnik

ICCV 2021

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## TEACHING EXPERIENCE

### University of Illinois

Urbana, IL

*Head Teaching Assistant, Computer Vision* [Link]

*Fall 2022*

- Coordination of assignments, grading, and office hours for class of ~250 students

*Teaching Assistant, Introduction to Deep Learning* [Link]

*Fall 2018*

- Developed assignments for new course. Held office hours and in-class tutorials for ~100 students

### Duke University

Durham, NC

*Teaching Assistant, Introduction to Computer Science*

*Fall 2014 - Fall 2015*

- Conducted weekly lab section with 25 students. Assisted in grading and office hours

*Teaching Assistant, Software Design and Implementation*

*Spring 2016 - Spring 2017*

- Held weekly student meetings to review code and improve design practices

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## SKILLS

**Languages:** *Experienced in:* Python, Java, MATLAB; *Familiar with:* C/C++, Javascript

**Technologies:** PyTorch, SciPy, Git, AWS/Google Cloud

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## SERVICE

**Reviewer:** ECCV and CVPR

**Student Admin:** Help manage membership, maintenance, and troubleshooting for vision group GPU cluster at Illinois

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## AWARDS

Illinois SURGE Fellowship, Sloan UCEM Fellowship, National Merit Scholar, National Hispanic Scholar