cpsiff.github.io
/in/cpsiff
/cpsiff

CARTER SIFFERMAN

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Research Interests

Computer vision, computational imaging, robot sensing, graphics

Education

2020-Present **University of Wisconsin – Madison: PhD Computer Science**

Graduated 2020 **Drury University: B.S. Computer Science**
Minor: Mathematics | GPA: 3.99

Experience

2020-Present **Graduate Teaching Assistant**
University of Wisconsin – Madison
- Computer Graphics (Fall 2021), Intro to Programming (Fall 2020, Spring 2021)

Summer 2021 **Graduate Research Assistant: Visual Computing Lab**
University of Wisconsin – Madison
- Created, implemented, and tested a novel method that enables recovery of 6D pose (extrinsic calibration) of a single-pixel depth sensor attached to a robot arm
- Implemented nonlinear optimization model which enabled 10-60% better performance on a downstream task when compared to alternative method
- Empirically characterized various single-pixel depth sensors

Summer 2019 **NSF Research Experience for Undergraduates**
University of Missouri – Columbia
- Developed integrated system for collection of depth video
- Adapted action recognition neural network to newly gathered field data

Summer 2018 **Software Intern**
Cerner
- Created web interface with React to replace desktop-based physician portal

Conference Papers

RA-L / ICRA 2022 **(Under Review)** **C. Sifferman**, M. Gupta, M. Gleicher. Geometric Applications of Single-Pixel Depth Sensors.

IEEE BIBM 2019 Z. Moore, **C. Sifferman**, S. Tullis, M. Ma, R. Proffitt, M. Skubic. Depth Sensor-Based In-Home Daily Activity Recognition and Assessment System for Stroke Rehabilitation.

Skills

Programming: Python (NumPy, Pandas, PyTorch), Java, JavaScript (React, Three.js), MATLAB, GAMS

Tools: Unix, Git, LaTeX, Linear Algebra