cpsiff.github.io
/in/cpsiff
/cpsiff

CARTER SIFFERMAN

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Education

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

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

Experience

Teacher's Assistant: CS200   **August 2020 - Present**
University of Wisconsin – Madison

NSF Research Experience for Undergraduates   **May 2019 – August 2019**
University of Missouri
- Created and deployed system for collection of video depth data from subject's home
- Adapted action recognition machine learning algorithm to train on newly collected data
- Wrote machine learning, data collection, and data processing code in Python (PyTorch) and C++
- Presenting author of resulting paper at IEEE BIBM 2019

Software Intern   **May 2018 – August 2018**
Cerner
- Created user interface for new preventative medicine product which interacts with existing API
- Automated deployment of new product with Docker and Jenkins, integrated automated build trigger with GitHub to test new commits and deploy on merge to master
- *Technology stack*: React, Rails, Docker, Jenkins

IT Intern   **May 2017 – May 2020**
Premier Home Health Care

Publications

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

Projects

Room Size Estimation from Panoramic Images using a Convolutional Neural Network
- Developed machine learning model and accompanying mobile application to estimate the floor space of a room from a panoramic RGB image
- *Technology stack*: Flutter, Node, SQL, AWS EC2

Deep Learning Research Group
- Created machine learning models and curriculum for computer vision, natural language processing, and mathematical foundations of neural networks