David Russell

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EDUCATION

CLARKSON UNIVERSITY
Pursuing B.S. in Computer Science (Honors)
Minor in Mathematics
Anticipated Graduation May 2020 | GPA: **4.0**

EXPERIENCE

RESEARCH ASSISTANT   June 2018 - November 2018
The Robotics Institute, Carnegie Mellon University
- Researching occlusion-robust object tracking under the advisement of Prof. Martial Hebert, the Robotics Institute director

RESEARCH AND DEVELOPMENT INTERN   January 2018 - May 2018
Kitware Inc.
- Explored approaches for low-shot detection in overhead imagery using C++ and Python/Pytorch
- Performed structure from motion and mapping experiments with aerial video

ROBOTICS INSTITUTE SUMMER SCHOLAR   June 2017 - August 2017
The Robotics Institute, Carnegie Mellon University
- Worked with Prof. Stelian Coros on a generalizable sensing strategy for soft robots that utlized RFID tags and physics-based simulations
- Conceptualized and implemented C++ simulation software and built physical test models

UNDERGRADUATE RESEARCHER   June 2016 - December 2017
Lab of Drs. Banerjee, Clarkson University
- Generated and analyzed thermally-textured point clouds using a FLIR thermal camera and an XBox Kinect
- Improved retrofit kit to synchronization multiple Microsoft Kinects for low-cost motion capture

PUBLICATIONS

Roy, V., **Russell, D.**, Chakrobarti, S., Hebert, M. (In Press). "Using Convolutional Neural Networks on Optical Flow for Visual Object Tracking." Robotics Institute Summer Scholars Working Papers Journal

Jiang, Y., **Russell, D.**, Godisart, T., Banerjee, N. K., and Banerjee, S. (2018). "Hardware Synchronization of Multiple Kinects and Microphones for 3D Audiovisual Spatiotemporal Data Capture." International Conference on Multimedia and Expo (ICME)
• Gave oral presentation on work at ICME

Russell, D., Bern, J., Coros, S. (2017). "Generalizable Pose Estimation for Soft Robots Using RFID Sensing." Robotics Institute Summer Scholars Working Papers Journal

ACTIVITIES

Teaching Assistant, Introduction to Programming, Clarkson University
Admission Ambassador, Clarkson Honors Program
Tutor, Clarkson Student Success Center
Member, Clarkson Innovation Network
Member, Clarkson Ultimate Frisbee Team

AWARDS

• Barry Goldwater Scholarship
• Sophomore Computer Science Award, Clarkson University
• NSF REU recipient
• Best Presentation, SURE conference section
• Clarkson University Presidential Scholar

SKILLS

Python
MATLAB
C++
Linux
Pytorch
Java