James Daniels

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EDUCATION

Master of Science in Computer Science August 2020 – December 2023
Ohio University GPA: 3.9

- Thesis - Comparative Evaluation of Point Cloud Registration Models
- Specialization: Satellite-Based Navigation Systems, Hardware for Deep Learning, Advanced AI.

Bachelor of Science in Economics September 2015 – May 2019
University of Bath, England Grade: First Class Honors

- Focus: Econometrics, Game Theory, Probability and Statistics.

PROFESSIONAL EXPERIENCE

Ohio University, Athens, Ohio January 2021 – December 2023
Teaching Assistant

- Administered weekly recitation sessions in Discrete Mathematics for Computer Science with classes of 30 students. Created content to complement lectures, graded exams and established best practice.
- Facilitated discussion of concepts and their application to various areas of computer science. Explored topics including set theory, discrete probability and algorithm run time analysis.

Avionics Engineering Center - Ohio University, Athens, Ohio May – December 2022
Research Assistant

- Conducted airport runway surface inspection using a multi-spectral sensor system mounted to a drone. Completed georeferencing LiDAR and camera data for use in downstream tasks.
- Trained an object detection model using a convolutional neural network to automatically detect and label debris on runway surface.
- Presented research to the Federal Aviation Administration (FAA) as part of the Joint University Program's annual conference held at the W. J. Hughes Technical Center, Egg Harbor, New Jersey.

Hargreaves Lansdown, Bristol, England June 2017 – June 2018
Equity Dealer

- Brokered trades in equities, corporate bonds, and trusts on markets in Europe and North America.
- Developed pricing tool for executing trades from personal to tax efficient accounts, ensuring speed and accuracy in time sensitive conditions.

TECHNICAL SKILLS

Languages: C/C++, MATLAB, Python.
Strengths: Quantitative Analysis, Critical Thinking, Project Management.
Tools/Libraries: AWS, Git, Keras, Open3D, OpenCV, Point Cloud Library, PyTorch, TensorFlow.
Projects: Differential GPS Receiver. Bitcoin price prediction using Twitter. Direct Georeferencing of LiDAR returns.