Trevor Olsen

Ph.D.

tvolsenmath@gmail.com
https://tvolsen.github.io/

About Me

Knowledgeable graduate looking to utilize and develop existing skill set in a Data Science or Machine Learning position. Respected leader with years of teaching experience at numerous levels. Proven problem solving abilities displayed by an extensive research track record. Highly motivated, concurrently pursued two doctoral degrees.

Skills

- Python
  - Scikit-learn
  - Matplotlib
  - Pandas
  - Numpy
  - SageMath
  - XGBoost (in progress)
  - PyTorch (in progress)
- Mathematics
  - Graph Theory
  - Combinatorics
  - Probability
  - Algebra
- Computer Science
  - Theoretical Robotics
  - Algorithms
  - Machine Learning
  - Computational Mathematics
  - SQL (in progress)

Working Experience

2016 – 2021 **Graduate Assistant** University of South Carolina
Conducted research, instructed 8 courses, graded for 10 courses

2015 – 2016 **Adjunct Faculty** Miami Dade College
Instructed 8 courses

2014 – 2015 **College Athlete Tutor** University of Miami
Provided additional academic support for football players

2012 – 2013 **Mathematics Tutor** Palm Beach Atlantic University
Provided additional academic support for undergraduate students

Education

2018 – 2021 **Ph.D. in Computer Science** University of South Carolina
Dissertation: Sampling and Robustness in Multi-Robot Visibility-Based Pursuit-Evasion
Advisor: Jason O'Kane
GPA: 3.8

2016 – 2020 **Ph.D. in Mathematics** University of South Carolina
Dissertation: Distance Related Graph Invariants in Triangulations and Quadrangulations of the Sphere
Advisors: Éva Czabarka and László Székely
GPA: 3.6

2018 – 2021 **M.S. in Computer Science** University of South Carolina
GPA: 3.8

2013 – 2015 **M.A. in Mathematics** University of Miami
GPA: 3.3

2011 – 2013 **B.S. in CS and Mathematics** Palm Beach Atlantic University
GPA: 3.4

2009 – 2011 **A.A. in Liberal Arts** Inver Hills Community College
GPA: 3.0

Publications

2022 **Proximity in Triangulations and Quadrangulations**
Electronic Journal of Graph Theory and Applications

2022 **Robust-by-Design Plans for Multi-Robot Visibility-Based Pursuit-Evasion**
International Conference on Robotics and Automation (ICRA)

2021 **Rapid Recovery from Robot Failures in Multi-Robot Visibility-Based Pursuit-Evasion**
International Conference on Intelligent Robots and Systems (IROS)

2021 **Clinical Characteristics of Suspected COVID-19 in Pediatric Patients**
International Journal of Critical Care and Emergency Medicine

2021 **A Visibility Roadmap Sampling Approach for a Multi-Robot Visibility-Based Pursuit-Evasion Problem**
International Conference on Robotics and Automation (ICRA)

2021 **Wiener Index and Remoteness in Triangulations and Quadrangulations**
Discrete Mathematics & Theoretical Computer Science

2020 **Minimum Wiener Index of Triangulations and Quadrangulations**
under review

May 9, 2022 Trevor Olsen