TREVOR OLSEN

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EDUCATION

University of South Carolina, Columbia, SC   *August 2018 - Present*
Ph.D. in Computer Science
Dissertation: *Multi-robot Visibility-Based
Pursuit-Evasion*
Advisor: Jason O'Kane

University of South Carolina, Columbia, SC   *August 2016 - May 2020*
Ph.D. in Mathematics
Dissertation: *Distance Related Graph Invariants in
Triangulations and Quadrangulations of the Sphere*
Advisors: Éva Czabarka and László Székely

University of South Carolina, Columbia, SC   *August 2018 - August 2021*
M.S. in Computer Science

University of Miami, Coral Gables, FL   *August 2013 - May 2015*
M.A. in Mathematics

Palm Beach Atlantic University, West Palm Beach, FL   *August 2011 - May 2013*
B.S. in Mathematics and Computer Science (dual major)

Inver Hills Community College, Inver Grove Heights, MN   *August 2009 - May 2011*
Associate of Arts

EMPLOYMENT

University of South Carolina, Columbia, SC   *August 2020 - Present*
Graduate Assistant, Computer Science

University of South Carolina, Columbia, SC   *August 2016 - May 2020*
Graduate Assistant, Mathematics

Miami Dade College-Kendall, Kendall, FL   *January 2016 - August 2016*
Adjunct Faculty, Mathematics

Miami Dade College-Wolfson, Miami, FL   *May 2015 - December 2015*
Adjunct Faculty, Mathematics

University of Miami, Coral Gables, FL   *August 2014 - May 2015*
College Athlete Tutor, Mathematics

Palm Beach Atlantic University, West Palm Beach, FL   *August 2012 - May 2013*
Departmental Tutor, Mathematics

PUBLICATIONS AND PREPRINTS

8. K. Henson-Evertz and T. Olsen, *Increasing Nicotine Dependence Treatment Encounters Through Nursing Education* (in preparation)
7. T. Olsen, N. Stiffler and J. O'Kane, *Robust-by-Design Plans for Multi-Robot Pursuit-Evasion* (submitted, ICRA 2022)

6. T. Olsen, N. Stiffler and J. O'Kane, *Rapid Recovery from Robot Failures in Multi-Robot Visibility-Based Pursuit-Evasion* (accepted, IROS 2021)

5. H. Yerdon, L. Mutter, T. Olsen, R. Travis and A. Suessman, *Clinical Characteristics of Suspected COVID-19 in Pediatric Patients* (accepted, International Journal of Critical Care and Emergency Medicine)

4. T. Olsen, A. Tumlin, N. Stiffler and J. O'Kane *A Visibility Roadmap Sampling Approach for a Multi-Robot Visibility-Based Pursuit-Evasion Problem* (accepted, ICRA 2021)

3. É. Czabarka, T. Olsen, S. Smith, L.A. Székely, *Minimum Wiener Index of Triangulations and Quadrangulations*, arXiv:2003.03873 (submitted)

2. É. Czabarka, P. Dankelmann, T. Olsen, L.A. Székely, *Proximity in Triangulations and Quadrangulations*, arXiv:2001.09012 (submitted)

1. É. Czabarka, P. Dankelmann, T. Olsen, L.A. Székely, *Wiener Index and Remoteness in Triangulations and Quadrangulations*, arXiv:1905.06753 (accepted, Discrete Mathematics & Theoretical Computer Science)

INVITED TALKS

6. IROS, *Rapid Recovery from Robot Failures in Multi-Robot Visibility-Based Pursuit-Evasion*, September 2021

5. ICRA, *A Visibility Roadmap Sampling Approach for a Multi-Robot Visibility-Based Pursuit-Evasion Problem*, June 2021

4. SEICCGTC, *Minimum Wiener Index on Triangulations and Quadrangulations*, March 2020

3. University of Miami Combinatorics Seminar, *Remoteness and Wiener Index on Triangulations and Quadrangulations*, November 2019

2. Carolina Math Seminar, *Remoteness and Wiener Index on Triangulations and Quadrangulations*, November 2019

1. U of SC Seminar in Advances in Computing , *Remoteness and Wiener Index on Triangulations and Quadrangulations*, November 2019

GENERAL TALKS

7. U of SC Discrete Math Seminar, *Minimum Wiener Index on Triangulations and Quadrangulations*, March 2020

6. U of SC Student Seminar, *Minimum Wiener Index on Triangulations and Quadrangulations*, March 2020

5. U of SC Student Seminar, *Multi-Robot Visibility-Based Pursuit-Evasion: A Sampling Approach*, October 2019

4. U of SC Student Seminar, *Remoteness and Wiener Index on Triangulations and Quadrangulations*, October 2019

3. U of SC Student Seminar, *The Sperner Property for Posets, a Probabilistic Approach*, January 2019

2. U of SC Research Seminar, *The Sperner Property for Posets, a Probabilistic Approach*, January 2019

1. U of SC Research Seminar, *A Computational Search in Triangulations*, October 2018

CONFERENCES ATTENDED

5. IEEE International Conference on Robotics and Automation, June 2021

4. IEEE International Conference on Robotics and Automation, June 2020

3. Southeastern International Conference on Combinatorics, Graph Theory & Computing, Florida Atlantic University, March 2020

2. Conference on Additive Combinatorics from a Geometric Viewpoint, University of South Carolina, May 2018
1. Graduate Student Combinatorics Conference, University of Texas at Dallas, April 2018

PROGRAMMING EXPERIENCE

- Python (including SageMath): Preferred and primary language

- C++: Used for a majority of my CS research

- Visual Basic: Used for a large portions of my undergraduate projects

- HTML: Used for creating personal static websites

RECENT COMMUNITY OUTREACH

3. Partners for Minorities in Engineering and Computer Science, Workshop Leader, June 2020
2. U of SC High School Math Contest, Group Activity Leader, January 2020
1. Partners for Minorities in Engineering and Computer Science, Workshop Leader, June 2019

TEACHING EXPERIENCE

Term	Course	Institution	Evaluation
Fa 2020	CSCE 750 Analysis of Algorithms (TA)	U of SC	N/A
Fa 2020	CSCE 350 Data Structures and Algorithms (TA)	U of SC	N/A
Sp 2020	MATH 170 Finite Mathematics	U of SC	4.46/5
Fa 2019	MATH 122 Buisness Calculus	U of SC	4.56/5
Su 2019	MATH 142 Calculus II	U of SC	4.55/5
Sp 2019	MATH 122 Buisness Calculus	U of SC	4.45/5
Fa 2018	MATH 141 Calculus I (TA)	U of SC	4.86/5
Fa 2018	MATH 141 Calculus I (TA)	U of SC	5/5
Su 2018	MATH 241 Vector Calculus	U of SC	4.86/5
Sp 2018	MATH 121 Business Calculus	U of SC	4.64/5
Fa 2017	MATH 111i Intensive Basic College Math	U of SC	4.79/5
Su 2017	MATH 142 Calculus II	U of SC	5/5
Sp 2017	MATH 142 Calculus II (TA)	U of SC	4.93/5
Sp 2017	MATH 142 Calculus II (TA)	U of SC	5/5
Sp 2017	MATH 142 Calculus II (TA)	U of SC	4.75/5
Sp 2017	MATH 142 Calculus II (TA)	U of SC	4.84/5
Fa 2016	MATH 142 Calculus II (TA)	U of SC	4.82/5
Fa 2016	MATH 142 Calculus II (TA)	U of SC	4.44/5
Su 2016	MAC 1114 Trigonometry	MDC	4.89/5
Sp 2016	MAC 1105 College Algebra	MDC	4.89/5
Sp 2016	MAC 1114 Trigonometry	MDC	4.89/5
Fa 2015	MAC 1105 College Algebra	MDC	4.89/5
Fa 2015	MAC 0057 Developmental Mathematics III	MDC	4.87/5
Fa 2015	MGF 1107 Math for Liberal Arts II	MDC	4.97/5
Su 2015	MAC 1147 Precalculus	MDC	4.95/5
Su 2015	MAC 2312 Calculus II	MDC	4.85/5