

# TREVOR OLSEN

541 Main Street, Columbia, SC 29201

Website: <https://tvolsen.github.io/>

Email: [tvolsen@email.sc.edu](mailto:tvolsen@email.sc.edu)

## EDUCATION

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| <b>University of South Carolina</b> , Columbia, SC<br>Ph.D. in Computer Science<br>Dissertation: <i>Multi-robot Visibility-Based Pursuit-Evasion</i><br>Advisor: Jason O’Kane  | <i>August 2018 - Present</i>  |
| <b>University of South Carolina</b> , Columbia, SC<br>Ph.D. in Mathematics<br>Dissertation: <i>Distance Related Graph Invariants in Triangulations and Quadrangulations of the Sphere</i><br>Advisors: Éva Czabarka and László Székely | <i>August 2016 - May 2020</i> |
| <b>University of South Carolina</b> , Columbia, SC<br>M.S. in Computer Science   | <i>August 2018 - Present</i>  |
| <b>University of Miami</b> , Coral Gables, FL<br>M.A. in Mathematics   | <i>August 2013 - May 2015</i> |
| <b>Palm Beach Atlantic University</b> , West Palm Beach, FL<br>B.S. in Mathematics and Computer Science (dual major)   | <i>August 2011 - May 2013</i> |
| <b>Inver Hills Community College</b> , Inver Grove Heights, MN<br>Associate of Arts  | <i>August 2009 - May 2011</i> |

## EMPLOYMENT

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| <b>University of South Carolina</b> , Columbia, SC<br>Graduate Assistant, Computer Science     | <i>August 2020 - Present</i>      |
| <b>University of South Carolina</b> , Columbia, SC<br>Graduate Assistant, Mathematics          | <i>August 2016 - May 2020</i>     |
| <b>Miami Dade College-Kendall</b> , Kendall, FL<br>Adjunct Faculty, Mathematics                | <i>January 2016 - August 2016</i> |
| <b>Miami Dade College-Wolfson</b> , Miami, FL<br>Adjunct Faculty, Mathematics                  | <i>May 2015 - December 2015</i>   |
| <b>University of Miami</b> , Coral Gables, FL<br>College Athlete Tutor, Mathematics            | <i>August 2014 - May 2015</i>     |
| <b>Palm Beach Atlantic University</b> , West Palm Beach, FL<br>Departmental Tutor, Mathematics | <i>August 2012 - May 2013</i>     |

## PUBLICATIONS AND PREPRINTS

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7. K. Henson-Evertz and T. Olsen, *Increasing Nicotine Dependence Treatment Encounters Through Nursing Education* (in preparation)
6. T. Olsen, A. Tumlin, N. Stiffler and J. O’Kane, *Rapid Recovery from Robot Failures in Multi-Robot Visibility-Based Pursuit-Evasion* (submitted)

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, 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

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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

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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

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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

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- 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

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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

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| 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     |