Connor Riley

PhD Student, Socially Aware Mobility Lab
Georgia Institute of Technology

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https://ctriley.github.io/

Education

Sept 2018 – Present **Ph.D. Student, Industrial and Systems Engineering**, *Georgia Institute of Technology*.
Advised by Pascal Van Hentenryck

Sept 2016 – Aug 2018 **Ph.D. Student, Industrial and Operations Engineering**, *University of Michigan*.
Advised by Pascal Van Hentenryck

May 2016 **B.S.E., Computer Science and Engineering**, *University of Connecticut*, *summa cum laude*.
Minor: Mathematics; Honors Thesis: *Equivalent Representations of Circle Packings*

Experience

Sept 2018 – Present **Georgia Institute of Technology**, *Research Assistant*, Atlanta, Georgia.
Developing simulation, optimization, and artificial intelligence software for the design and operation of transit systems.

May 2016 – Aug 2018 **The University of Michigan**, *Research Assistant*, Ann Arbor, Michigan.
Developing simulation, optimization, and artificial intelligence software for the design and operation of transit systems.

Sept 2015 – May 2016 **The University of Connecticut**, *Undergraduate Research Assistant*, Storrs, Connecticut.
Investigated equivalent representations of circle packings and algorithms to manipulate them.

Sept 2015 – May 2016 **Senior Design Project**, *Software Developer*, Storrs, Connecticut.
Developed an android application to allow for synchronous music playback on multiple devices through p2p networking.

Dec 2014 – May 2016 **Center for Voting Technology Research**, *Undergraduate Research Assistant*, Storrs, Connecticut.
Evaluated the functionality and security of various electronic pollbook solutions.

May 2015 – Aug 2015 **United Technologies Building & Industrial Systems (UTC) – Otis Elevator Company**, *Engineering Intern*, Farmington, Connecticut.
Developed an application to translate UI labels, stored in XML, into the spoken language selected by the user.

Aug 2014 – Dec 2014 **Cigna Corporation**, *Software Development Intern*, Storrs, Connecticut.
Created a role based access control dashboard to improve employee on-boarding.

June 2014 – Aug 2014 **Travelers Insurance Company**, *IT Intern*, Hartford, Connecticut.
Coordinated completion of system change requests for an IBM mainframe.

Service

March 2020 – Present **Rainbow Village**, *After School Program Tutor*, Duluth, Georgia.
Tutored students in math, science, english and history.

Summer 2017, 2018, 2019 **The Seth Bonder Camp in Computation and Data Science**, *Lab Coordinator*, Ann Arbor Michigan and Atlanta, Georgia.
Developed and ran lab activities for camp attendies.

Awards & Honors

2016 Graduate Fellowship, UM Industrial Operations Engineering Department

2015 Certificate of Outstanding Academic Achievement, UConn Computer Science and Engineering Department

2014 Babbidge Scholar, The University of Connecticut

2012 – 2016 Dean's List, UConn School of Engineering

2012 – 2016 Academic Excellence Scholarship, The University of Connecticut

Skills

General C, C++, Rust, Java, Python, MATLAB, Gurobi, CPLEX, Bash, Git, CMake, Docker, Rancher, LaTeX.

Parallel Computing MPI, OpenMP, CUDA.

Affiliations

2016 – Present Institute for Operations Research and the Management Sciences

2011 – Present Tau Beta Pi (The Engineering Honor Society)

2010 – Present Upsilon Pi Epsilon (The Computer Science Honor Society, Secretary for the University of Connecticut Chapter 2011-2012)

2010 – Present ACM (Association for Computing Machinery)

Publications

Conference & Journal Papers

[1] Thomas Ying-Jeh Chen, Connor Thomas Riley, Pascal Van Hentenryck, and Seth David Guikema. Optimizing inspection routes in pipeline networks. *Reliability Engineering System Safety*, 195:106700, 2020.

[2] Connor Riley, Antoine Legrain, and Pascal Van Hentenryck. Column generation for real-time ride-sharing operations. In Louis-Martin Rousseau and Kostas Stergiou, editors, *Integration of Constraint Programming, Artificial Intelligence, and Operations Research*, pages 472–487, Cham, 2019. Springer International Publishing.

[3] Kevin Pratt, Connor Riley, and Donald Sheehy. Exploring Circle Packing Algorithms. In Sándor Fekete and Anna Lubiw, editors, *32nd International Symposium on Computational Geometry (SoCG 2016)*, volume 51 of *Leibniz International Proceedings in Informatics (LIPIcs)*, pages 69:1–69:4, Dagstuhl, Germany, 2016. Schloss Dagstuhl–Leibniz-Zentrum fuer Informatik.

Posters & Presentations

[4] Antoine Legrain, Connor Riley, and Pascal Van Hentenryck. An on-demand multi-modal transportation system. In *21st Conference of the International Federation of Operational Research Societies (IFORS '17)*, Quebec City, Quebec, July 17-21, 2017.

[5] Tim Hull, Antoine Legrain, Ben Reeves, Connor Riley, Edward Fenwick, Jacob Ketter, and Pascal Van Hentenryck. Collecting data for an activity-based model of ann arbor. In *1st Michigan Institute for Data Science Symposium (MIDAS '16)*, Ann Arbor, MI, November 15-16, 2014.

[6] Tim Hull, Antoine Legrain, Connor Riley, and Pascal Van Hentenryck. A software architecture for an on-demand transit system. In *1st Michigan Institute for Data Science Symposium (MIDAS '16)*, Ann Arbor, MI, November 15-16, 2014.

[7] Ben Reeves, Connor Riley, Josh Lustig, Jane Zho, Will Burns, Kevin Jeoung, Jeff Sica, and Pascal Van Hentenryck. Pioneering campus-wide data collection through mobile apps. In *1st Michigan Institute for Data Science Symposium (MIDAS '16)*, Ann Arbor, MI, November 15-16, 2014.

[8] Connor Riley, Antoine Legrain, Ben Reeves, Jacob Ketter, and Pascal Van Hentenryck. An online greedy algorithm for an on-demand transit system. In *1st Michigan Institute for Data Science Symposium (MIDAS '16)*, Ann Arbor, MI, November 15-16, 2014.