# Sebastian Claici

(omitted for web)
(omitted for web)

⑤ (omitted for web)

☒ sclaici@mit.edu

⑥ http://people.csail.mit.edu/sclaici

### Education

2016–2020 PhD, Electrical Engineering and Computer Science, Massachusetts Institute of Tech-

nology, Cambridge, MA.

Advisor: Professor Justin Solomon

GPA: 4.9/5.0

2014–2016 SM, Electrical Engineering and Computer Science, Massachusetts Institute of Tech-

nology, Cambridge, MA.

Advisor: Professor Daniela Rus

Thesis: Aggregation for Modular Robots in the Pivoting Cube Model

GPA: 5.0/5.0

2010–2014 BS, Computer Science, University of Southampton, Southampton, UK.

GPA: 85.2/100

Honors: Zepler project prize

## Experience

Summer 2018 PhD Intern, Google, Mountain View, CA.

Undisclosed machine learning project for the AdSpam team.

Summer 2016 **Research Intern**, Bosch, Palo Alto, CA.

Designed a pipeline for semantic segmentation of building interiors into constituent parts (walls, floor, clutter, etc.). The internship culminated in a publication that was accepted for ICRA 2017.

Spring 2014 Research Assistant, University of Southampton, Southampton, UK.

Computational biology project on detecting signatures for mental health disorders.

Summer 2013 Research Intern, EPFL, Lausanne, Switzerland.

Designed a semi-supervised system for high-level activity recognition.

#### Publications

- [1] **Sebastian Claici**, Edward Chien, and Justin Solomon. "Stochastic Wasserstein Barycenters". In: Proceedings of the 35th International Conference on Machine Learning, ICML 2018, Stockholmsmässan, Stockholm, Sweden, July 10-15, 2018. 2018, pp. 998–1007. URL: http://proceedings.mlr.press/v80/claici18a.html.
- [2] **Sebastian Claici** and Justin Solomon. "Wasserstein Coresets for Lipschitz Costs". In: *CoRR* abs/1805.07412 (2018). arXiv: 1805.07412. URL: http://arxiv.org/abs/1805.07412.
- [3] Rares Ambrus\*, **Sebastian Claici**\*, and Axel Wendt. "Automatic Room Segmentation From Unstructured 3-D Data of Indoor Environments". In: *IEEE Robotics and Automation Letters* 2.2 (2017), pp. 749–756. DOI: 10.1109/LRA.2017.2651939. URL: https://doi.org/10.1109/LRA.2017.2651939.

- [4] Cenk Baykal, Guy Rosman, **Sebastian Claici**, and Daniela Rus. "Persistent surveillance of events with unknown, time-varying statistics". In: 2017 IEEE International Conference on Robotics and Automation, ICRA 2017, Singapore, Singapore, May 29 June 3, 2017. 2017, pp. 2682–2689. DOI: 10.1109/ICRA.2017.7989313. URL: https://doi.org/10.1109/ICRA.2017.7989313.
- [5] **Sebastian Claici**, Mikhail Bessmeltsev, S. Schaefer, and Justin Solomon. "Isometry-Aware Preconditioning for Mesh Parameterization". In: *Comput. Graph. Forum* 36.5 (2017), pp. 37–47. DOI: 10.1111/cgf.13243. URL: https://doi.org/10.1111/cgf.13243.
- [6] **Sebastian Claici**, John Romanishin, Jeffrey I. Lipton, Stéphane Bonardi, Kyle William Gilpin, and Daniela Rus. "Distributed aggregation for modular robots in the pivoting cube model". In: 2017 IEEE International Conference on Robotics and Automation, ICRA 2017, Singapore, Singapore, May 29 June 3, 2017. 2017, pp. 1489–1496. DOI: 10.1109/ICRA.2017.7989178. URL: https://doi.org/10.1109/ICRA.2017.7989178.
- [7] Matthew Staib, **Sebastian Claici**, Justin M. Solomon, and Stefanie Jegelka. "Parallel Streaming Wasserstein Barycenters". In: *Advances in Neural Information Processing Systems 30: Annual Conference on Neural Information Processing Systems 2017*, 4-9 December 2017, Long Beach, CA, USA. 2017, pp. 2644–2655. URL: http://papers.nips.cc/paper/6858-parallel-streaming-wasserstein-barycenters.
- [8] John W. Romanishin, Kyle Gilpin, **Sebastian Claici**, and Daniela Rus. "3D M-Blocks: Self-reconfiguring robots capable of locomotion via pivoting in three dimensions". In: *IEEE International Conference on Robotics and Automation, ICRA 2015, Seattle, WA, USA, 26-30 May, 2015.* 2015, pp. 1925–1932. DOI: 10.1109/ICRA.2015.7139450. URL: https://doi.org/10.1109/ICRA.2015.7139450.

#### Invited Conferences

Spring 2017 **Optimal Transport Meets Probability, Statistics and Machine Learning**, Casa Matemática Oaxaca (CMO), Oaxaca, Mexico.

#### Professional Activities

Reviewer

Neural Information Processing Systems (NIPS)
International Conference on Machine Learning (ICML)
SIAM Journal on Imaging Sciences (SIIMS)

**Teaching** 

Students Supervised

Spring 2016 Elizabeth Mittman