Erik Wijmans

Education

- Aug 2017 Ph.D. in Computer Science (3rd year student), Georgia Institute of Technology, Present Atlanta, GA, Advisors: Irfan Essa and Dhruv Batra.
- May 2017 Bachelor of Science, Computer Engineering, Summa Cum Laude, Washington University in St. Louis, St. Louis, MO.
- May 2017 Bachelor of Science, Engineering Physics, Magna Cum Laude, Juniata College, Huntingdon, PA.

Publications

- M. Savva, A. Kadian, O. Maksymets, Y. Zhao, E. Wijmans, B. Jain, J. Straub, J. Liu, V. Koltun, J. Malik, D. Parikh, and D. Batra. Habitat: A Platform for Embodied Al Research. In *International Conference on Computer Vision (ICCV)*, 2019. **(Oral)**.
- E. Wijmans[†], S. Datta[†], O. Maksymets[†], A. Das, G. Gkioxari, S. Lee, I. Essa, D. Batra, and D. Parikh. Embodied question answering in photorealistic environments with point cloud perception. In *Computer Vision and Pattern Recognition (CVPR)*, 2019. **(Oral)**.
- J. Straub, T. Whelan, L. Ma, Y. Chen, E. Wijmans, S. Green, J. J. Engel, R. Mur-Artal, C. Ren, S. Verma, A. Clarkson, M. Yan, B. Budge, Y. Yan, X. Pan, J. Yon, Y. Zou, K. Leon, N. Carter, J. Briales, T. Gillingham, E. Mueggler, L. Pesqueira, M. Savva, D. Batra, H. M. Strasdat, R. D. Nardi, M. Goesele, S. Lovegrove, and R. Newcombe. The Replica dataset: A digital replica of indoor spaces. *arXiv:1906.05797*, 2019.
- E. Wijmans and Y. Furukawa. Exploiting 2D floorplan for building-scale panorama rgbd alignment. In *Computer Vision and Pattern Recognition (CVPR)*, 2017.
- Y. Cao, S. Li, and E. Wijmans. (Cross-)browser fingerprinting via os and hardware level features. In *Network and Distributed System Security Symposium (NDSS)*, 2017.

Internships

- May-Aug. Research Intern, Facebook Al Research, Menlo Park, CA.
 - 2019 With Manolis Savva and Dhruv Batra
 - Studying what agents learn when they solve a large-scale AI task
- May-Aug. **Research Intern**, Facebook Reality Labs, Redmond, WA.
 - 2018 With Julian Straub (FRL) and Dhruv Batra (FAIR)
 - Worked on the first steps towards the Replica Dataset and Al Habitat.
- May-Aug. NSF REU Fellow, Lehigh University, Bethlehem, PA.
 - 2016 Worked with Yinzhi Cao Song Li

May-Aug. NSF REU Fellow, Washington University in St. Louis, St. Louis, MO.

2015 With Yasutaka Furukawa.

Honors and Awards

- 2019-20 Scholar Award fellowship from the Achievement Rewards for College Scientists (ARCS) Foundation (\$8,500)
- o Washington University in St. Louis Department of Computer Science and Engineering Outstanding Junior Award (3 awards for \sim 100 eligible juniors)
- o Harold P. Brown Engineering Fellowship (2 awards for \sim 100 applicants)
- o William E. and Florence Schmidt Memorial Scholarship
- Calvert Ellis Scholarship
- o Member of Sigma Pi Sigma (National Physics Honor Society)

Posters and Invited Talks

2019 **Poster and Invited Talk**, CVPR 2019, Long Beach, CA.

For Embodied Question Answering in Photorealistic Environments with Point Cloud Perception

2019 Invited Talk, Habitat Embodied Agents Workshop, 2019, Long Beach, CA.

About my top entry to the Habitat-Challenge leader-board

2017 Poster, CVPR 2017, Honolulu, Hawaii.

For Exploiting 2D Floorplan for Building-scale Panorama RGBD Alignment

Professional Activities

- o Reviewer for NeurIPS2019
- o Organizer for Visually Grounded Interaction and Language Workshop, 2018 and 2019
- o Organizer for Habitat: Embodied Al Challenge & Workshop, 2019 and 2020

Teaching

- o Teaching Assistant, Deep Learning, Fall 2018
- o Teaching Assistant, Machine Learning, Fall 2017
- o Teaching Assistant, Introduction to Systems Software, Spring 2016 Spring 2017