Erik Wijmans

Education

Aug 2017–Present **Ph.D. in Computer Science (3rd year student)**, *Georgia Institute of Technology*, 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

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)**.

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 AI Research. In *International Conference on Computer Vision (ICCV)*, 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. 2019 **Research Intern**, *Facebook AI Research*, Menlo Park, CA.
With Manolis Savva and Dhruv Batra
- Studying what agents learn when they solve a large-scale AI task

May–Aug. 2018 **Research Intern**, *Facebook Reality Labs*, Redmond, WA.
With Julian Straub (FRL) and Dhruv Batra (FAIR)
- Studied the task dependence of visual representations learned in simulated environments.

May–Aug. 2016 **NSF REU Fellow**, *Lehigh University*, Bethlehem, PA.
Worked with Yinzhi Cao Song Li

May–Aug. 2015	**NSF REU Fellow**, *Washington University in St. Louis*, St. Louis, MO. With Yasutaka Furukawa.

Honors and Awards

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

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

Teaching

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