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

1. **E. Wijmans**, A. Kadian, A. Morcos, S. Lee, I. Essa, D. Parikh, M. Savva, and D. Batra. Decentralized Distributed PPO: Solving PointGoal Navigation.
   In *arXiv:1911.00357*, 2019
2. 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 Talk, top 187 of 4303 submissions = top-4.3%
   Best Paper Award Nominee, top 11 of 4303 submissions = top-0.25%
3. **E. Wijmans**†, S. Datta†, O. Maksymets†, A. Das, G. Gkioxari, S. Lee, I. Essa, D. Parikh, and D. Batra. Embodied Question Answering in Photorealistic Environments with Point Cloud Perception.
   In *Computer Vision and Pattern Recognition (CVPR)*, 2019.
   Oral Talk, top 288 of 5160 submissions = top-5.5% .
4. 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.
   In *arXiv:1906.05797*, 2019.
5. **E. Wijmans** and Y. Furukawa. Exploiting 2D Floorplan for Building-Scale Panorama RGB-D Alignment.
   In *Computer Vision and Pattern Recognition (CVPR)*, 2017.
6. Y. Cao, S. Li, and **E. Wijmans**. (Cross-)Browswer Fingerprinting via OS and Hardware Level Features.
   In *Network and Distributed System Security Symposium (NDSS)*, 2017.

Honors and Awards

- Best Paper Award Nominee at the Internation Converfence on Computer Vision (ICCV), 2019. Top 11 of 4303 submissions = top-0.25%
- 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)

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)

- Worked on the first steps towards the Replica Dataset and AI Habitat.

May–Aug. 2016 **NSF REU Fellow**, *Lehigh University*, Bethlehem, PA.
Mentored by Yinzhi Cao (now at Johns Hopkins University).

May–Aug. 2015 **NSF REU Fellow**, *Washington University in St. Louis*, St. Louis, MO.
Mentored by Yasutaka Furukawa (now at Simon Fraser University).

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, CVPR2020
- 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