

Ethan Weinberger

1625 13th Ave
Seattle, WA 98122
☎ +1 (203) 858 5502
✉ ewein@cs.washington.edu

Education

- 2019–2024 **Ph.D in Computer Science and Engineering**, *University of Washington*, Seattle, WA.
(expected)
Advisor: Su-In Lee
GPA: 4.0/4.0
- 2019–2021 **M.S. in Computer Science and Engineering**, *University of Washington*, Seattle, WA.
Awarded en route to Ph.D.
- 2014–2018 **B.S. in Computer Science and Mathematics**, *Yale University*, New Haven, CT.
Graduated *cum laude*, with distinction in the major
GPA: 3.86/4.0

Experience

Research

- 2019–Present **Graduate Student Researcher**, *AIMS Lab, University of Washington*, Seattle, WA.
○ Researching generative models for single cell transcriptomic data.
- Summer 2018 **Postgraduate Researcher**, *Kluger Lab, Yale School of Medicine*, New Haven, CT.
○ Developed a pipeline for training convolutional neural networks to classify whole-slide images into different cancer subtypes.
- Spring 2018 **Undergraduate Researcher**, *Kluger Lab, Yale School of Medicine*, New Haven, CT.
○ Researched methods for defending convolutional neural networks against adversarial attacks.

Industry

- 2018–2019 **Technology Associate**, *Bridgewater Associates*, Westport, CT.
○ Developed new abstractions to improve the productivity of Bridgewater’s machine learning researchers.
○ Worked on scaling up Bridgewater’s big-data infrastructure.

Honors & Awards

- 2021-2026 NSF Graduate Research Fellowship
○ Full financial support for three years of graduate study within a five-year period.
Total amount awarded: **\$138,000**.

- 2019 Allen School Computer Science & Engineering Research Fellowship
- Full funding for first year of studies at the Allen School.
- 2015 Richard U. Light Fellowship
- Full funding for summer of intensive Chinese study at National Taiwan University, Taipei

Refereed Conference Publications

- [1] **Ethan Weinberger**, Nicasia Beebe-Wang, and Su-In Lee. “Moment Matching Deep Contrastive Latent Variable Models”. In: *Artificial Intelligence and Statistics (AISTATS)* (2022).

Refereed Journal Publications

- [2] Nicasia Beebe-Wang, Safiye Celik, **Ethan Weinberger**, et al. “Unified AI framework to uncover deep interrelationships between gene expression and Alzheimer’s disease neuropathologies”. In: *Nature Communications* 12.1 (2021), pp. 1–17.
- [3] Lina Irshaid, Jonathan Bleiberg, **Ethan Weinberger**, et al. “Histopathologic and Machine Deep Learning Criteria to Predict Lymphoma Transformation in Bone Marrow Biopsies”. In: *Archives of Pathology & Laboratory Medicine* (2021).

Refereed Workshop Publications

- [4] **Ethan Weinberger***, Chris Lin*, and Su-In Lee. “Isolating salient variations of interest in single-cell transcriptomic data with contrastiveVI”. In: *International Conference on Learning Representations (ICLR) Workshop on Machine Learning for Drug Discovery* (2020).
- [5] **Ethan Weinberger**, Ayse Dincer, and Su-In Lee. “HD-MD: Batch-effect-free embeddings of scRNA-seq data”. In: *Machine Learning in Computational Biology* (2020).

Conference Reviewing

- 2021 Artificial Intelligence and Statistics (AISTATS)
- 2021 Research in Computational Molecular Biology (RECOMB)
- 2021 International Conference on Learning Representations (ICLR)
- 2021 Machine Learning in Computational Biology (MLCB)
- 2021 Neural Information Processing Systems (NeurIPS)

Service and Volunteering

- 2021 Prospective Ph.D Students Visit Days Committee, University of Washington
- 2020 Application reader for the 2020 Ph.D application cycle
- 2020 Mentor for a group of three first year students at the Allen School

- 2020 Volunteer for the Allen School's Pre-Application Review Service (PARS), a service for students from underrepresented groups to receive advance feedback on the application materials to Ph.D programs.
- 2020 Prospective Ph.D Students Visit Days Committee, University of Washington

References

Su-In Lee

Paul G. Allen School of Computer
Science & Engineering
185 E Stevens Way NE
Seattle, WA 98195
✉ suinlee@cs.washington.edu

Yuval Kluger

Department of Pathology
Yale School of Medicine
300 George Street
New Haven, CT, 06511
✉ yuval.kluger@yale.edu
☎ 203-737-6262

Julian Jara-Ettinger

Department of Psychology
Yale University
2 Hillhouse Avenue
New Haven, CT, 06511
✉ julian.jara-ettinger@yale.edu
☎ 203-432-7904