Zoya Bylinskii, Ph.D.

Senior ML Engineering Manager @ Adobe
Evals Lead, Firefly GenAI Models & Services
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Professional Summary

Zoya Bylinskii, Ph.D., founded and leads Quality & Harm Evaluation for Adobe Firefly's suite of generative imaging and video models, a function she established in early 2023. Previously, as a Senior Research Scientist in Adobe Research's Imaging & Languages Lab, she developed perceptually grounded models for computational imaging, graphic design, and visualization. She also co-founded Adobe's Readability Initiative and The Readability Consortium, uniting industry and academia to personalize reading experiences and advance accessibility. Across her academic and industry career, Zoya's work has centered on applying insights from human perception and cognition to AI systems and user experiences. With a deep scientific foundation, productization experience in fast-moving GenAI environments, and a record of cross-organizational leadership, she thrives in strategic roles at the intersection of innovation and product.

Professional Experience

Feb 2023 – Present – Senior ML Engineering Manager, Evals Lead, Adobe Firefly

Founded and led the team responsible for Quality & Harm Evaluation of Adobe Firefly's generative imaging and video models. Defined and executed the evaluation strategy for Firefly and other GenAI features across Adobe products. Partnered with foundational model, product management, user research, ethical innovation, and product equity teams to align evaluation with product and responsible AI goals.

- Managed a 14-person multidisciplinary team of engineers, data scientists, and applied scientists, including two managers.
- Delivered 150+ Eval reports for model selection, release decisions, and benchmarking.
- Supported 15+ Firefly model releases, across imaging and video.
- Collaborated with 5+ internal product teams to enable GenAI feature launches and onboarded Adobe's premiere product teams to use evaluation tools.

2018 – 2023 – Senior Research Scientist, Adobe Research, Imaging & Languages Lab

Led research bridging human perception and AI-driven design systems, focusing on computational imaging, visualization, and readability personalization.

- **Publications & Patents**: Authored 25+ peer-reviewed publications in computer vision, human-computer-interaction, information visualization, and human vision venues (incl. CVPR, ECCV, CHI, UIST, TOCHI, PloS One, PacificVis) and 5 issued patents on readability theme generation, layout generation, parsing and reflowing infographics, visual importance for graphic design and data visualization, and attention-driven image manipulation.
- **Service & Leadership**: Adobe Patent Review Committee Member (2020-2022), Adobe Intern Core Team Lead (2020-2023), Perception & Cognitive A.I. Seminar Series Organizer (2020-2023), ETRA Paper Chair (2022, 2023), CHI Area Chair (2023), ETVIS Workshop Chair (2022), UIST Area Chair (2020, 2021), CHI Workshop Chair (2021), CVPR Area Chair (2020), VIS Area Chair (2020)
- **Affiliations**: MIT CSAIL Alliances (2021 – 2022), Harvard Institute of Applied Computational Science (2019 – 2020)

2021 – 2023 – **Co-founder and Executive Board Member, The Readability Consortium**

Co-founded and served on the executive board, shaping the consortium's research and industry strategy to advance personalized reading.

- **Media**: WSJ – "What's your type? Try these tests to pick the perfect font for you" (2023), FastCompany – "Are fonts ageist?" (2022), Nielsen Norman Group – "Best font for online reading" (2022)
- **Recognitions**: FastCompany World Changing Ideas Awards Finalist – Education & Software (2021), UserTesting Distinguished Luminary Award for Adobe's Readability Initiative (2021)

2012 – 2018 – **Research Assistant, Massachusetts Institute of Technology**

Bridged vision science and information visualization through research on memorability, attention, and perception-driven design, and organized cross-disciplinary symposia connecting cognitive science and visualization communities.

- **Publications**: Authored 11+ peer-reviewed papers spanning computer vision, human–computer interaction, information visualization, and human vision.
- **Teaching**: Teaching assistant for *Preparation for Undergraduate Research* (received departmental teaching award) and *Introduction to Machine Learning*.
- **Leadership**: Organized cross-disciplinary symposia, and served on MIT Graduate Programs, Faculty Policy, Digital Learning, and EECS Visiting Committees.
- **Recognition & Outreach**: Invited participant in Google's Student Research Summit (YouTube, 2017), Facebook's Women in Research: Lean In (2016), and the Anita Borg Alumni Community (2014). Delivered invited talks at Harvard, Berkeley, UBC, Inria, and Boston University.

Selected Awards & Honors

Adobe Founder's Award (2023), Adobe Q3 DME Impact Award (2021), Women at Adobe Leadership Recognition Program (2021), Leadership Circles (2021), NSERC Postgraduate Scholar (2014 – 2016), Adobe Research Fellow (2016), EECS Rising Star (2018), George M. Sprowls PhD Thesis Award (2018), Anita Borg Scholar (2011), Julie Payette Research Scholar (2013).

Education

2018 – Ph.D. in Computer Science, MIT, Thesis: *Computational perception for multimodal document understanding*

2015 – M.Sc. in Computer Science, MIT, Thesis: *Computational understanding of image memorability*

2012 – Hon. B.Sc. in Computer Science and Statistics, University of Toronto