Nur Yıldırım

Newell-Simon Hall 4501 5000 Forbes Ave Pittsburgh, PA 15213, USA

https://nuryildirim.github.io/ yildirim@cmu.edu

Education

08/2018 - Carnegie Mellon University

Pittsburgh, PA, USA

06/2024 Ph.D. in Human-Computer Interaction

(expected) School of Computer Science

Thesis: Discovering the Right Things to Design with Artificial Intelligence

Advisors: John Zimmerman and James McCann

Committee: Jodi Forlizzi (HCI Institute), Kayur Patel (Apple AI/ML)

2014 - Middle East Technical University

Ankara, Turkey

M.Sc. in Industrial Design (Informatics track)

2011 - Middle East Technical University B.ID. in Industrial Design Ankara, Turkey

Experience

06/2023 - Microsoft Research

Cambridge, UK

08/2023 Research Intern (with Anja Thieme, Hannah Richardson – Health Futures)

Designed clinically relevant use cases for large language and vision model capabilities in radiology.

06/2022 - Google People + AI Research

Cambridge, MA, USA

08/2022 Research Intern (with Fernanda Viegas, Martin Wattenberg)
Investigated how practitioners use the People + AI Guidebook in AI projects [C.4].

03/2020 - Accenture Labs

Remote

02/2021 Research Lead on Sponsored Research (with Alex Kass, Teresa Tung)
Investigated how design practitioners effectively envision AI innovations [C.3].

06/2011 – **Designnobis**

Ankara, Turkey

07/2018 Industrial Designer

Designed products ranging from consumer electronics to assistive robots, microfluidics, transportation, lighting and toys. Shipped 25+ products along with several patents and design awards.

Peer-Reviewed Conference Publications

- [C.6] Nur Yildirim, Changhoon Oh, Deniz Sayar, Kayla Brand, Supritha Challa, Violet Turri, Nina Crosby Walton, Anna Elise Wong, Jodi Forlizzi, James McCann, John Zimmerman. Creating Design Resources to Scaffold the Ideation of AI Concepts. In *Proceedings of the 2023 Designing Interactive Systems Conference* (DIS'23). Pittsburgh, PA, USA. Best Paper Honorable Mention.
- [C.5] Wesley Hanwen Deng, Nur Yildirim, Monica Chang, Motahhare Eslami, Kenneth Holstein, Michael Madaio. Investigating Practices and Opportunities for Cross-functional Collaboration around AI Fairness in Industry Practice. In 2023 ACM Conference on Fairness, Accountability, and Transparency (FAccT'23). Chicago, IL, USA.
- [C.4] Nur Yildirim, Mahima Pushkarna, Nitesh Goyal, Martin Wattenberg, Fernanda Viegas. Investigating How Practitioners Use Human-AI Guidelines: A Case Study on the People + AI Guidebook. In *Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems* (CHI'23). Hamburg, Germany. Best Paper Honorable Mention.
- [C.3] Nur Yildirim, Alex Kass, Teresa Tung, Connor Upton, Donnacha Costello, Robert Giusti, Sinem Lacin, Sara Lovic, James O'Neill, Rudi O'Reilly Meehan, Eoin Ó Loideáin, Azzurra Pini, Medb Corcoran, Jeremiah Hayes, Diarmuid Cahalane, Gaurav Shivhare, Luigi Castoro, Giovanni Caruso, Changhoon Oh, James McCann, Jodi Forlizzi, John Zimmerman. How Experienced Designers of Enterprise Applications Engage AI as a Design Material. In Proceedings of the 2022 CHI Conference on Human Factors in Computing Systems (CHI'22). New Orleans, LA, USA.

- [C.2] Nur Yildirim, Matthew Franklin, Daniel Zeng, John Zimmerman, James McCann. metaSVG: A Portable Exchange Format for Adaptable Laser Cutting Plans. In *Proceedings of the 2022 Graphics Interface Conference* (GI'22). Montreal, Canada.
- [C.1] Nur Yildirim, James McCann, John Zimmerman. 2020. Digital Fabrication Tools at Work: Probing Professionals' Current Needs and Desired Futures. In *Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems* (CHI'20). Honolulu, HI, USA.

Workshop, Symposia, and Extended Abstracts

- [W.4] Frederic Gmeiner, Nur Yildirim. 2023. Dimensions for Designing LLM-based Writing Support. In *Joint Proceedings of CHI '23 Workshop on Intelligent and Interactive Writing Assistants*. Hamburg, Germany.
- [W.3] Nur Yildirim. 2022. Emergent HCI Approaches to Envisioning with Generative AI Capabilities. In *Joint Proceedings of CHI '22 Workshop on Generative AI and HCI*. New Orleans, LA, USA.
- [W.2] Nur Yildirim. 2022. Developing Design Tools to Support Envisioning with Data and AI. In *Joint Proceedings of CHI '22 Workshop on InContext: Futuring User-Experience Design Tools*. New Orleans, USA.
- [W.1] Nur Yildirim, John Zimmerman, Sarah Preum. 2021. Technical Feasibility, Financial Viability, and Clinician Acceptance: On the many challenges to AI in Clinical Practice. In Proceedings of The AAAI 2021 Fall Symposium on Human Partnership with Medical Artificial Intelligence. Virtual Event.

Journal Publications and Book Chapters

- [J.2] Jodi Forlizzi, Qian Yang, Changhoon Oh, **Nur Yildirim**, John Zimmerman. Designing AI Products and Services: Benefits, Challenges, and Ideas for Improving Design Practice. To appear in the Human-Centered Machine Learning book edited by Rebecca Fiebrink, Marco Gillies, Gonzalo Ramos.
- [J.1] Nur Yildirim. 2019. Marker Rendering Techniques. In *Creative Sketching in Product Design*. Ed. Shijian, L., Qiumei, L. SendPoints Publishing, Hong Kong.

Magazine Articles

[M.1] John Zimmerman, Changhoon Oh, Nur Yildirim, Alex Kass, Teresa Tung, Jodi Forlizzi. 2021. UX Designers Pushing AI in the Enterprise: A Case for Adaptive UIs. *Interactions* 28, 1 (December 2020), 72-77.

Invited Talks

Mar 2024 Designing Successful AI Products and Services (with John Zimmerman)
(forthcoming) South by Southwest (SXSW)
Austin, TX, USA

Oct 2023 Discovering the Right Things to Design with Artificial Intelligence University of Michigan – AI Symposium

Host: Anhong Guo, Stella Yu

Aug 2023 Exploring Use Cases for Vision-LLMs in Radiology Imaging

Microsoft

Host: Anja Thieme, Hannah Richardson (Health Futures)

Oct 2022 Envisioning AI Products with AI Capabilities + Examples

Microsoft Research – Metaphors for Human-AI Interaction Workshop Host: Siân Lindley (MSR Cambridge, UK)

Aug 2022 AI Design Sprints: Facilitating Collective Ideation of Human-Centered AI Products

Google – AI Design Symposium

Host: Clara Kliman-Silver, Tiffany Knearem (Material Design)

Mar 2019 Design Sketching Workshop

University of Minnesota, College of Design

Host: Barry Kudrowitz

Oct 2017 Success Stories: From Lab To The Market (Panelist)

7th Annual International Conference on Managing Intellectual Property in Universities Bosphorus University, Istanbul

Awards and Honors

2023	AI Rising Star	The Michigan	AI Lab,	University	of Michigan
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- 2023 DIS 2023 Best Paper Honorable Mention [C.6]
- 2023 CHI 2023 Best Paper Honorable Mention [C.4]
- 2022 Center for Machine Learning and Health, Translational Fellowship in Digital Health
- 2021 CRA-W Graduate Cohort for Women
- 2012 International Design Awards, Emerging Designer of the Year
- 2007-2011 Undergraduate Scholarship Award Community Volunteers Foundation

Teaching

2024 05-317/05-617 Design of AI Products and Services (Co-Instructor)

(forthcoming) Carnegie Mellon University - HCI Institute Instructors: John Zimmerman and Nur Yildirim

2023 Guest Lecture 'AI Design Ideation' @ Understanding Human-Centered AI

The University of Texas at Austin - UT iSchool

Instructor: Min Kyung Lee

2022 Guest Lecture 'Design Systems' @ Introduction to HCI

Carnegie Mellon University - HCI Institute

Instructor: Sauvik Das

2022 05-410/05-610 User-Centered Research and Evaluation (TA)

Carnegie Mellon University - HCI Institute

Instructors: Raelin Musuraca and Aniket Kittur

2021 05-674/17-200 Ethics and Policy Issues in Computing (TA)

Carnegie Mellon University – HCI Institute Instructors: James Herbsleb and Laura Dabbish

Service

2022-2023 Associate Chair

ACM CHI 2024

ACM DIS 2023

ACM CHI 2023

ACM DIS 2022

2022 Workshop Team Leader

OurCS Workshop for Undergraduates in Computer Science

2022 Programme Committee Member

ACM CUI Short Papers

Since 2020 Reviewer

ACM CHI*, DIS*, HRI, CSCW, UIST

*2 Special Recognitions for Outstanding Reviews

2020-2021 Mentor

CMU Graduate Application Assistance

CMU Undergraduate AI Mentoring Program

Recognition for Design Work

- 2019 International Design Awards, Infant Products, Call Vision Infant Charm, Gold
- 2019 International Design Awards, Children Safety Products, Call Vision Infant Charm, Silver
- 2018 International Design Awards, Robotics, Assist On-Arm, Gold
- 2018 International Design Awards, Life Science, Assist On-Arm, Bronze
- 2016 German Design Award, Packaging, SASA Water, Special Mention
- 2015 Design et al Yacht and Aviation Awards, Snow, Finalist
- 2015 A' Design Award, Home Appliances, Reverence, Silver
- 2015 A' Design Award, Electronic Devices, LeapVox Videophone, Bronze
- 2015 A' Design Award, Furniture Accessories, Zavinna, A' Design
- 2015 German Design Award, Lifestyle, Creative Wooden Creatures, Nominee
- 2015 International Design Awards, Home Electronics, LeapVox Videophone, Silver
- 2014 A' Design Award, Hardware and Power Tools, Mini ST Toolset, Silver
- 2014 A' Design Award, Packaging, SASA Water, Bronze
- 2014 A' Design Award, Packaging, SASA I-Cube, Bronze
- 2014 German Design Award, Transportation and Public Space, TAXI Station, Nominee
- 2014 International Design Awards, Architecture, TAXI Station, Honorable Mention
- 2014 International Design Awards, Urban Design, TAXI Station, Honorable Mention
- 2013 IDEA, Leisure and Recreation, Creative Wooden Creatures, Finalist
- 2013 International Design Awards, Toys, Creative Wooden Creatures, 3rd Prize
- 2013 Green Dot Awards, Products, Creative Wooden Creatures, Honorable Mention
- 2013 A' Design Award, Home Appliances, Stream Beam, Bronze
- 2012 A' Design Award, Toys and Games, Creative Wooden Creatures, Platinum
- 2012 A' Design Award, Yacht and Marine Vessels, Snow, Gold
- 2012 International Design Awards, Kitchen Appliances, Stream Beam, 1st Prize
- 2011 International Design Awards, Kitchen Appliances, planTree, 2nd Prize

Mentoring

2023 - Aradhana Venkat

Master's student at the Human-Computer Interaction Institute at Carnegie Mellon University

2023 - Simran Chawla

Master's student at the Human-Computer Interaction Institute at Carnegie Mellon University

2023 – Jennifer Kim

Undergraduate student majoring in Business Administration at Carnegie Mellon University

2022 - Kayla Brand

Undergraduate student majoring in Computer Science at Wellesley College

2022 - Supritha Challa

Undergraduate student majoring in Computer Science at the University of Wisconsin-Madison

2022 – Shuyu Liu

Undergraduate student majoring in Design and HCI at Carnegie Mellon University

2022 - Proud Taranat

Undergraduate student majoring in Design and HCI at Carnegie Mellon University

2021 – 2022 Min Kyoung Lee

Master's student at the School of Design at Carnegie Mellon University

2021 - Anna Elise Wong

Undergraduate student majoring in Robotics Engineering at the University of California, Santa Cruz

2021 - Nina Crosby Walton

Undergraduate student majoring in Design and HCI at Washington University in St. Louis

2020 - 2021 Daniel Zeng

Undergraduate student majoring in Computer Science at Carnegie Mellon University

2020 - 2021 Matthew Franklin

Master's student at the Human-Computer Interaction Institute at Carnegie Mellon University

References

John Zimmerman (Co-Advisor)

Tang Family Professor of AI and HCI HCI Institute, Carnegie Mellon University johnz@cs.cmu.edu

James McCann (Co-Advisor)

Associate Professor Robotics Institute, Carnegie Mellon University jmccann@cs.cmu.edu

Jodi Forlizzi

Herbert A. Simon Professor in CS and HCI HCI Institute, Carnegie Mellon University forlizzi@cs.cmu.edu

Anja Thieme

Principal Researcher Microsoft Research anthie@microsoft.com

Last updated: December 5, 2023