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

07/2024 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, Kayur Patel

2014 - Middle East Technical University M.Sc. in Industrial Design

Ankara, Turkey

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 [C.9].

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.9] Nur Yildirim, Hannah Richardson, Teo Wetscherek, Junaid Bajwa, Joseph Jacob, Mark Pinnock, Stephen Harris, Daniel Coelho de Castro, Shruthi Bannur, Stephanie Hyland, Pratik Ghosh, Mercy Ranjit, Kenza Bouzid, Anton Schwaighofer, Fernando Pérez-García, Harshita Sharma, Ozan Oktay, Matthew Lungren, Javier Alvarez-Valle, Aditya Nori, Anja Thieme. Multimodal Healthcare AI: Identifying and Designing Clinically Relevant Vision-Language Applications for Radiology. In Proceedings of the 2024 CHI Conference on Human Factors in Computing Systems (CHI'24). Honolulu, HI, USA.
- [C.8] Nur Yildirim, Susanna Zlotnikov, Deniz Sayar, Jeremy Kahn, Leigh Bukowski, Sher Shah Amin, Kathryn Riman, Billie Davis, John Minturn, Andrew King, Dan Ricketts, Lu Tang, Venkatesh Sivaraman, Adam Perer, Sarah Preum, James McCann, John Zimmerman. Sketching AI Concepts with Capabilities and Examples: AI Innovation in the Intensive Care Unit. In Proceedings of the 2024 CHI Conference on Human Factors in Computing Systems (CHI'24). Honolulu, HI, USA.
- [C.7] Nur Yildirim, Susanna Zlotnikov, Aradhana Venkat, Gursimran Chawla, Jennifer Kim, Leigh Bukowski, Jeremy Kahn, James McCann, John Zimmerman. Investigating Why Clinicians Deviate from Standards of Care: Liberating Patients from Mechanical Ventilation in the ICU. In Proceedings of the 2024 CHI Conference on Human Factors in Computing Systems (CHI'24). Honolulu, HI, USA. Best Paper Honorable Mention.

- [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 June 2024 Designing Successful AI Products and Services (with John Zimmerman) United States Digital Service Washington, D.C. Apr 2024 Designing Successful AI Products and Services Goodnotes (Hong Kong & London offices) zigzag GmbH (Berlin & Stuttgart studios) Jan 2024 - Closing the AI Innovation Gap Apr 2024 Apple, Human Centered Machine Intelligence Drexel University, the Department of Information Science University of Virginia, the School of Data Science University of Virginia, the Department of Computer Science University of Wisconsin-Madison, the Department of Computer Sciences New York University, the Department of Technology Management and Innovation Mar 2024 Designing Successful AI Products and Services (with John Zimmerman) 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

2024	CHI 2024 Best Paper Honorable Mention [C.9]
2023	AI Rising Star, The Michigan AI Lab, University of Michigan
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)

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, Leap Vox 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	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
	International Design Awards, Kitchen Appliances, Stream Beam, 1st Prize
2011	International Design Awards, Kitchen Appliances, planTree, 2nd Prize
	Montoving
	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

2014 German Design Award, Transportation and Public Space, TAXI Station, Nominee2014 International Design Awards, Architecture, TAXI Station, Honorable Mention

Last updated: June 11, 2024