Nur Yıldırım

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Education

08/2018 – *06/2024* *(expected)*	**Carnegie Mellon University** Ph.D. in Human-Computer Interaction 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	**Pittsburgh, PA, USA**
2014 –	**Middle East Technical University** M.Sc. in Industrial Design (Informatics track)	**Ankara, Turkey**
2011 –	**Middle East Technical University** B.ID. in Industrial Design	**Ankara, Turkey**

Experience

06/2023 – *08/2023*	**Microsoft Research** 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].	**Cambridge, UK**
06/2022 – *08/2022*	**Google People + AI Research** Research Intern (with Fernanda Viegas, Martin Wattenberg) Investigated how practitioners use the People + AI Guidebook in AI projects [C.4].	**Cambridge, MA, USA**
03/2020 – *02/2021*	**Accenture Labs** Research Lead on Sponsored Research (with Alex Kass, Teresa Tung) Investigated how design practitioners effectively envision AI innovations [C.3].	**Remote**
06/2011 – *07/2018*	**Designnobis** 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.	**Ankara, Turkey**

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. **(to appear at CHI'24)**

[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. **(to appear at CHI'24)**

[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. **(to appear at CHI'24)**

[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.

Publications Under Review or In Progress

[P.1] **Nur Yildirim**, Leigh Bukowski, Jeremy Kahn, James McCann, John Zimmerman. Co-designing AI Systems for Coordination in the Intensive Care Unit. *(In preparation)*

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
(forthcoming) **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

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 FAccT 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
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