Laura Stegner

Curriculum Vitae — July 2023

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EDUCATION

2019–Current	**PhD in Computer Sciences**, *University of Wisconsin–Madison (UW–Madison)*, USA, Research area: Human-Robot Interaction, Advisor: Dr. Bilge Mutlu Doctoral minor: Kinesiology
2019–2022	**MS in Computer Sciences**, *UW–Madison*, USA
2014–2019	**BS in Electrical Engineering**, *University of Cincinnati (UC)*, Ohio, USA Summa Cum Laude, Distinguished University Honors Scholar
Fall 2018	**Exchange Student**, *Newcastle University*, Newcastle upon Tyne, UK Full semester academic exchange
Summer 2015	**Study Abroad**, *Seoul National University*, South Korea Summer language and culture program

RESEARCH EXPERIENCE

2019–Current	**Research Assistant**, *People and Robots Lab, UW–Madison*, Wisconsin, USA, PI: Dr. Bilge Mutlu Programming techniques for assistive robots in care settings
Summer 2023	**NREIP Researcher**, *Naval Research Laboratory*, Washington, DC, USA, PI: Dr. Laura Hiatt
2018–2019	**Research Intern**, *Max Planck Institute for Software Systems (MPI-SWS)*, Kaiserslautern, Germany (Summers only), PI: Dr. Rupak Majumdar Creating parameterized test environments for autonomous car controllers
2017–2018	**Research Co-op**, *Novel Device Lab / Eccrine Systems, Inc.*, Cincinnati, Ohio, USA (part time), PI: Dr. Jason Heikenfeld Developing and characterizing a sweat flow-rate sensor

AWARDS and HONORS

2023	**Golden Brick Award**, *UW–Madison departmental award for outstanding service*
2023	**Best Talk**, *Audience favorite award at UW–Madison Computer Science Departmental Research Symposium*
2019	**Presidential Leadership Medal of Excellence**, *Recognized for outstanding service and leadership during undergraduate studies*
2017	**Mantei/Mae Award**, *Selected by UC Electrical Engineering and Computer Science Department*, also awarded in 2018 and 2019

FUNDING

2020 **National Science Foundation Graduate Fellowship**, *3 years of full PhD funding and 2 years of additional support*

2019 **LUCID Training Program**, *2 years of full PhD funding*

2018 **Rowe Scholarship Fund**, *Full support for exchange semester at Newcastle University*

2018 **DAAD RISE Germany Scholar**, *3 months research support at MPI-SWS*

PUBLICATIONS

2023 **Situated Participatory Design: A Method for In Situ Design of Robotic Interaction with Older Adults**

L. Stegner, E. Senft, and B. Mutlu

CHI '23: Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems

Sketching Robot Programs On the Fly

D. Porfirio, **L. Stegner**, M. Cakmak, A. Sauppé, A. Albarghouthi, and B. Mutlu

HRI '23: Proceedings of the 2023 ACM/IEEE International Conference on Human-Robot Interaction

2022 **Designing for Caregiving: Integrating Robotic Assistance in Senior Living Communities**

L. Stegner and B. Mutlu

DIS '22: Designing Interactive Systems Conference

2021 **Figaro: A Tabletop Authoring Environment for Human-Robot Interaction**

D. Porfirio, **L. Stegner**, M. Cakmak, A. Sauppé, A. Albarghouthi, and B. Mutlu

CHI '21: Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems

Paracosm: A test framework for autonomous driving simulations

R. Majumdar, and A. Mathur, M. Pirron, **L. Stegner** and D. Zufferey

FASE 2021: 24th International Conference on Fundamental Approaches to Software Engineering

POSTERS and WORKSHOPS

2023 **Knowing Who Knows What: Designing Socially Assistive Robots with Transactive Memory System**

Y. Hu, **L. Stegner**, and B. Mutlu

SARs: TMI Workshop at CHI '23

2023 **Factors that Affect Personalization of Robots for Older Adults**

L. Stegner, E. Senft, and B. Mutlu

CONCATENATE Workshop at HRI '23

2018 **Programming-Direct Manipulation Integration for Simulation Environments**
R. Majumdar, A. Mathur, M. Pirron, **L. Stegner** and D. Zufferey
2018 RISE Germany Meeting

2016 **Determination of manganese using cathodic stripping voltammetry and lead using anodic stripping voltammetry**
L. Stegner, W. Kang, E. Haynes, W.R. Heineman, I. Papautsky
2016 American Chemical Society Central Regional Meeting

2014 **Using Kepler data to classify the evolutionary state of red giant stars**
D. Miller, [and 20 others, including D. Ciardi, S. Howell, and **L. Stegner**]
2014 American Astronomical Society Meeting

INVITED TALKS

2023 **MIRRORLab Summer Speaker Series**, *Colorado School of Mines*, Virtual
2023 **National Robotarium and Edinburgh Centre for Robotics**, *Edinburgh, Scotland*

TEACHING

2022 **Guest Lecturer**, *UW-Madison SOC WORK/SOC 422: Social Issues in Aging*
Design considerations for robots in senior living communities

2022 **Session Instructor**, *UW-Madison Grandparents University*
Co-organized and led interactive lab on social robotics for children and their grandparents

2021 **Workshop Facilitator**, *UW-Madison Psychology Research Experience Program*
Created hands-on virtual workshop introducing natural language processing with Python

2019 **Teaching Assistant**, *UC College of Engineering and Applied Science*
Led weekly discussion sessions for project-based introductory engineering course

2019 **Lab Instructor**, *UC Department of Electrical Engineering and Computer Science*
Designed and led labs for intro programming course using the Zumo32U4 bots from Polulu

2017 **Peer Mentor**, *UC Center for Firt Year Experience*
Planned and taught weekly classes for freshman engineers to ease college transition

MENTORING

UNDERGRADUATES

2022-2023 **Julian Zhu**, *Mobile app development for managing resident profiles*
2023 **Sai Akarsh Ache**, *Developing a taxonomy for social robot personalization*
2021-2022 **Zach Potter**, *Mobile app development for care robot programming*
2021 **Kartikeye Khanna**, *Web-based controller for Stretch robot from Hello-Robot*
2021 **Emma Liu**, *Autonomous mapping with Stretch robot from Hello-Robot*

OUTREACH and SERVICE

2021-Current **People and Robots Lab Tours**, *3-5 annually*
2020-Current **Treasurer**, *Student Association for Computing Machinery (ACM)*

2023 **High school outreach day**, *Organized and hosted half-day program*

2017-2019 **Vice President**, *Eta Kappa Nu Honor Society*

2014-2018 **Math and Reading Tutor**, *Cincinnati Public Schools*

━━━━ INDUSTRY EXPERIENCE

2017 **Protection and Controls Intern**, *American Electric Power*, Columbus, Ohio, USA, (Jan–May 2017)
Assisted with detailed scoping for substation networking projects; Performed quality review of schematic and wiring diagrams

2016 **Manufacturing Systems Co-op**, *Sandvik Hyperion*, Worthington, Ohio, USA, (May–Aug 2016)
Designed method to import data from sister plant into local database

2015 **Manufacturing Systems Co-op**, *Sandvik Hyperion*, Worthington, Ohio, USA, (Aug–Dec 2015)
Developed database modules and end-user software to digitize process improvement tracking