

Jeremy B. Warner

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UC Berkeley, Berkeley, CA 94720

INTERESTS *Human-Computer Interaction, Computer Graphics, Style Transfer, Vector Graphics, Design Tools, Collaboration, Debugging, Prototyping, Electronics, Education*

EDUCATION **University of California, Berkeley** 2023
Ph.D. in Electrical Engineering and Computer Science (EECS)
Advisor: Björn Hartman

University of Rochester 2016
M.S. in Computer Science
Advisor: Philip J. Guo

B.S. in Electrical and Computer Engineering, *cum laude* 2015
Advisors: Wendi Heinzelman and Philip J. Guo

Selected Coursework

HCI – UI Design and Development, HCI Methods, Interactive Device Design
Graphics – Computer Vision, Computer Graphics, Computational Photography

PUBLICATIONS Peer-reviewed Conference and Journal Proceedings

- [1] Interactive Flexible Style Transfer for Vector Graphics
Jeremy Warner, Kyu Won Kim, Björn Hartmann
ACM Conference on Human Factors in Computing Systems (CHI 2023) – under review
- [2] SlideSpecs: Automatic and Interactive Presentation Feedback Collation
Jeremy Warner, Amy Pavel, Tonya Nguyen, Maneesh Agarwala, Björn Hartmann
ACM Conference on Intelligent User Interfaces (IUI 2023) – under review
- [3] Visual Design Reuse Through Style Recognition and Transfer
Jeremy Warner
ACM Symposium on User Interface Software and Technology (UIST DC 2021)
- [4] Multi-level Correspondence via Graph Kernels for Editing Vector Graphics Designs
Valentina Shin, **Jeremy Warner**, Björn Hartmann, Celso Gomes, Holger Winnemoeller, Wilmot Li
Proceedings of the Graphics Interface Conference (GI 2021)
- [5] ElectroTutor: Test-Driven Physical Computing Tutorials
Jeremy Warner, Ben Lafreniere, George Fitzmaurice, Tovi Grossman
ACM Symposium on User Interface Software and Technology (UIST 2018)

- [6] WiFrost: Bridging the Information Gap for Debugging of Networked Embedded Systems
Will McGrath, **Jeremy Warner**, Mitchell Karchemsky, Andrew Head, Daniel Drew, Björn Hartmann
ACM Symposium on User Interface Software and Technology (UIST 2018)
- [7] MatchSticks: Woodworking through Improvisational Digital Fabrication
Rundong Tian, Ethan Chiou, Sarah Sterman, **Jeremy Warner**, Eric Paulos
ACM Conference on Human Factors in Computing Systems (CHI 2018) – Honorable Mention Paper
- [8] Virtual Reality Games in Sensory Deprivation Tanks
Steve Mann, Max Lu Hao, **Jeremy Warner**
IEEE Games, Entertainment, Media Conference (GEM 2018)
- [9] Bifröst: Visualizing and Checking Behavior of Embedded Systems across Hardware and Software
Will McGrath, Daniel Drew, **Jeremy Warner**, Majeed Kazemitabaar, Mitchell Karchemsky, David Mellis, Bjoern Hartmann
ACM Symposium on User Interface Software and Technology (UIST 2017)
- [10] Hack.edu: Examining How College Hackathons Are Perceived By Student Attendees and Non-Attendees
Jeremy Warner and Philip J. Guo
ACM International Computing Education Research conference (ICER 2017)
- [11] CodePilot: Scaffolding End-to-End Collaborative Software Development for Novice Programmers
Jeremy Warner and Philip J. Guo
ACM Conference on Human Factors in Computing Systems (CHI 2017)
- [12] Toward a Domain-Specific Visual Discussion Forum for Learning Computer Programming
Joyce Zhu, **Jeremy Warner**, Mitchell Gordon, Jeffery White, Renan Zanelatto, Philip J. Guo
IEEE Symposium on Visual Languages and Human Centric Computing (VL/HCC 2015)
- [13] How High School, College, and Online Students Differentially Engage with an Interactive Digital Textbook
Jeremy Warner, John Doorenbos, Bradley Miller, Philip J. Guo
International Conference on Educational Data Mining (EDM 2015)
- [14] MH-REACH-Mote: Supporting Multi-hop Passive Radio Wake-up for Wireless Sensor Network
Li Chen, **Jeremy Warner**, Wendi Heinzelman, Ilker Demirkol
IEEE International Conference on Communications (ICC 2015)
- [15] REACH2-Mote: A range extending passive wake-up wireless sensor node
Li Chen, **Jeremy Warner**, Pak Lam Yung, Dawei Zhou, Wendi Heinzelman, Ilker Demirkol, Ufuk Muncuk, Kaushik Chowdhury, Stefano Basagni
ACM Transactions on Sensor Networks (TOSN 2015)

EXPERIENCE	Graduate Researcher, UC Berkeley – Hartmann Group 2016 – <i>Graphic design tools, presentation tools, electronics debugging.</i> Affiliated with the Berkeley Institute of Design (BiD) Advised by Björn Hartmann
	Research Scientist Intern, Apple – AI/ML 2020 – 2021 <i>3D scene capture, annotation, and traversal for AR accessibility.</i> Advised by Jeff Bigham, Amy Pavel and Javier Reyes
	Research Scientist Intern, Adobe – Creative Intelligence Lab 2019 <i>Multi-level graph kernel correspondences for vector graphics.</i> Advised by Wilmot Li, Valentina Shin and Holger Winnemöller
	Research Scientist Intern, Autodesk – User Interface Group 2018 <i>Electronics prototyping and test support (ElectroTutor).</i> Advised by Tovi Grossman and Benjamin Lafreniere
	Graduate Researcher, U. of Rochester – ROHCI 2015 – 2016 <i>Live collaborative programming with asynchronous versioning.</i> Advised by Philip J. Guo
	Visiting Researcher, U. of Washington – Ko Group 2015 <i>Collaborative online programming tool for novices.</i> Advised by Philip J. Guo
	Undergraduate Researcher, U. of Rochester – ROHCI 2014 – 2015 <i>Hackathon participation study, online textbook analysis.</i> Advised by Philip J. Guo
	Lab Assistant, U. of Rochester – Wireless Network Group 2013 – 2014 <i>Design, testing, and write-up for low-power wireless sensors.</i> Advised by Wendi Heinzelman
	NSF REU Intern, U. of Rochester – Wireless Networking Group 2013 <i>Designed and built a wireless control system to test RFID tags.</i> Advised by Wendi Heinzelman
	MENTORSHIP
Angela Zhang 2021 – <i>Focus: Laplacian flow analysis and graph matching.</i>	
Frederick Kim (now M.S. at Berkeley EECS) 2021 – 2022 <i>Co-authored Vector Graphics Style Transfer paper.</i>	
Tonya Nguyen (now Ph.D. at Berkeley iSchool) 2018 – 2020 <i>Co-authored SlideSpecs (Presentation Feedback) paper.</i>	

TEACHING	GSI for DI 202, Technology Design Foundations <i>Graduate student instructor: support Master's students projects.</i>	F2021
	Head GSI for CSC 160, User Interface Design and Development <i>Led discussion sections, gave feedback on student UI prototypes.</i>	S2020
	Head GSI for CSC 169, Software Engineering <i>Led discussion sections, design exam questions, guide team projects.</i>	F2019
	Head GSI for CSC 160, User Interface Design and Development <i>Create and grade programming assignments, give technical lectures.</i>	F2017
	Teaching Assistant for ECE 112, Introduction to Logic Design	S2015
	Teaching Assistant for ECE 112, Introduction to Logic Design	S2014
	Teaching Assistant for ECE 230, Electromagnetic Waves	F2014
	Teaching Assistant for ECE 112, Introduction to Logic Design	S2013
SERVICE	Professional	
	Reviewer for CHI, UIST, CSCW, ISS, CNC, TEI <i>Recognition for outstanding reviews: 5x (3 CHI, 2 UIST)</i> <i>Completed 26 total conference paper reviews.</i>	2018 – 2023
	Organizing Committee, ACM UIST Conference	2023
	Feature Editor, ACM XRDS Student Magazine	2019
	Volunteer, ACM SIGCHI Executive Committee	2018
	Student Volunteer, ACM CHI Conference	2017
	University of California, Berkeley	
	WiCSE Peer Mentoring (2 grad students) <i>Meet 1-2x per semester to provide support.</i>	2021 – 2022
	BiD Seminar (Berkeley HCI) Speaker Coordinator	2018 – 2020
	UC Berkeley HCI PhD Admit Weekend Organizer	2017 – 2018
	University of Rochester	
	President, IEEE Student Branch <i>Organized middle school outreach events with E/M demos.</i> <i>Hosted professional speakers, fix-it nights, and joint CSUG events.</i>	2013 – 2015
	Volunteer Tutor, Computer Science Undergraduate Group	2014 – 2015
	Volunteer Tutor, Tau Beta Pi Engineering Honor Society	2013 – 2014
Vice President, IEEE Student Branch	2012 – 2013	

AWARDS	UC Berkeley EECS Departmental Fellowship	2022
	UC Berkeley Graduate Student Travel Grant (UIST)	2022
	Outstanding Conference Paper Reviews <i>(2x for CHI 2021 Papers, 2x UIST 2022, 1x CHI 2023)</i>	2021 – 2023
	Nominated for Microsoft PhD Fellowship (1 of 3), UC Berkeley	2018
	NSF Graduate Research Fellowship – Honorable Mention	2017
	University of Rochester – Barnard Engineering Award <i>Given to graduating engineering students on the basis of personal qualifications and achievements (8 of roughly 1k eligible students).</i>	2015
	Inducted into the Phi Beta Kappa Honor Society	2015
	Dean’s Award for Engineering and Applied Sciences Research	2015
	IEEE National Power and Energy Society (PES) Scholarship	2014
	Inducted into the Tau Beta Pi Engineering Honor Society	2013
Graduate Engineering At Rochester (GEAR) Scholarship <i>Guaranteed admission and 75% off tuition for 5th year MS.</i>	2011	
OTHER WORK	Hardware Intern, Teradyne – North Reading, MA Developed a toolchain to upgrade semiconductor tests.	2014
	Assistant Carpenter, North Fork Woodworks – Mattituck, NY Home construction and renovation (summers).	2011 – 2012
SKILLS	<p>Programming Languages Proficient: Python, Javascript, Ruby Familiar: C++, TypeScript, Java</p> <p>Tools and Frameworks Physical: Soldering, Woodworking, 3D Printing, Laser Cutting Digital: Colab, Logic Pro, Camtasia, Photoshop, Illustrator, Figma Libraries: OpenCV, PyTorch, React, Redux, Meteor, Rails, Jekyll</p>	
PERSONAL	<p>I enjoy trail running. I play guitar in a math-rock band (AIRPLUG). A video of and friend and I covering a song with guitars is here. Throughout undergrad, I rowed on the varsity rowing team.</p>	