



Nadir Weibel Ph.D.

Research Affiliations

University of California San Diego, USA, Computer Science and Engineering Dept,
-*Human-centered eXtended Intelligence (HXI) Research Lab*
-*The Design Lab*
-*Center for Wireless and Population Health Systems*
-*Contextual Robotics Institute.*

Research Interests

My work intersects computer science, human-centered design, and time-critical domains such as healthcare, education, and automation. I design and evaluate interactive systems integrating eXtended Reality (XR), Artificial Intelligence (AI), and pervasive sensing technologies, leveraging multimodal data—body and eye movements, physiological signals, speech, and social interactions—to enhance human behavior in real-world and digital environments. This research bridges human needs and computational systems, addressing critical challenges in equitable healthcare delivery, education, and social equity.

I develop tools and prototypes combining generative AI with XR for adaptive learning, ethical AI frameworks for life-critical domains, and multimodal systems using depth cameras, eye tracking, wearables, and XR. These efforts address systemic inequities and deliver human-centered solutions with real-world impact, spanning radiation oncology training, remote surgical mentoring, and mental health interventions.

I actively publish in premier venues like ACM CHI, UIST, IMWUT, and ASSETS, contributing to Human-Computer Interaction, Ubiquitous Computing, and Pervasive Health communities. My work reflects a commitment to leveraging emerging technologies for inclusive, transformative impact.

Languages

Italian: *native*; **English:** *fluent*; **German:** *fluent*; **French:** *fluent*; **Spanish:** *basic*

Academic Qualifications

July 2009

Ph.D. in Computer Science (Dr.Sc. ETH), ETH Zurich, Switzerland.

Dissertation topic: A Publishing Infrastructure for Interactive Paper Documents: Supporting Interactions across the Paper-Digital Divide

September 2003

M.Sc.in Computer Science (Dipl.Informatik-Ing.ETH), ETH Zurich, Switzerland.

Major: Computer Science, Minor: Neuroinformatics

October 2001 –
February 2002

Didactics Training ETH, ETH Zurich, Switzerland.

ETH Competence Center for Teaching

October 2001

B.Sc.in Computer Science, ETH Zurich, Switzerland.

Nadir Weibel – University of California San Diego – La Jolla CA, 92093-0404, USA

☎ +1 (858) 534-8637 • ✉ weibel@ucsd.edu • 📧 weibel@ucsd.edu

Research and Teaching Experience

- July 2023 - **University of California San Diego, La Jolla CA, USA,**
Department of Computer Science and Engineering.
Full Professor
- October 2023 - **University of California San Diego, La Jolla CA, USA,**
Department of Computer Science and Engineering.
Director of the eXtended Reality (XR) Lab
- March 2022 - **University of California San Diego, La Jolla CA, USA,**
The Design Lab.
Associate Faculty Director
- January 2013 - **VA San Diego Healthcare System, San Diego CA, USA.**
Research Health Science Specialist
- July 2019 - June 2023 **University of California San Diego, La Jolla CA, USA,**
Department of Computer Science and Engineering.
Associate Professor
- July 2013 - June 2017 **University of California San Diego, La Jolla CA, USA,**
Department of Computer Science and Engineering.
Assistant Research Professor
- October 2012 - June 2019 **University of California San Diego, La Jolla CA, USA.**
Lecturer in Computer Science and Cognitive Science
- October 2012 - June 2013 **University of California San Diego, La Jolla CA, USA,**
Department of Computer Science and Engineering.
Senior Researcher
- October 2009 - September 2012 **University of California San Diego, La Jolla CA, USA,**
Department of Cognitive Science.
Postdoctoral Researcher
- September 2007 – September 2009 **DECS (Department of Education Culture and Sports), Canton of Ticino, Switzerland.**
Lecturer, Course and Exam Coordinator
- September 2004 – August 2008 **ETH Zurich, Zurich, Switzerland,**
Global Information Systems Research Group, Dept. of Computer Science.
Research and Teaching Assistant
- September 2003 – August 2004 **Centro Professionale Trevano, Lugano, Switzerland.**
Lecturer
- February 2001 – July 2003 **ETH Zurich, Zurich, Switzerland,**
Dept. of Computer Science.
Tutorial Assistant

Other Professional Experience

- March 2021 - **Homni Health Solutions, Inc, San Diego, USA.**
Co-Founder and Chief Scientific Officer

Nadir Weibel – University of California San Diego – La Jolla CA, 92093-0404, USA

☎ +1 (858) 534-8637 • ✉ weibel@ucsd.edu • 🌐 weibel.ucsd.edu

- June 2020 - **Advanced Technology and Design Consulting, La Jolla, USA.**
Principal/Owner
- April 2015 - **Aira Tech Corp, San Diego, USA.**
Scientific Advisory Board Member
- September 2008 – August 2009 **SunGard Financial Systems, Zurich, Switzerland.**
Research Engineer and Solution Consultant
- March 2004 – September 2009 **DECS (Department of Education Culture and Sports), Canton of Ticino, Switzerland.**
Computer Networking Consultant
- September 2003 – August 2004 **Centro Professionale Trevano, Lugano, Switzerland.**
Software and Information Architecture Consultant

Publications*

Books and Book Chapters

- [1] K. Zheng, D. Hanauer, Z. Agha, and N. Weibel. Computational Ethnography: Automated and Unobtrusive Means for Collecting Data in situ for Human-Computer Interaction Studies. In V. L. Patel, T. G. Kannampallil, and D. Kaufman, editors, *Cognitive Informatics in Health and Biomedicine: Human Computer Interaction in Healthcare*. Springer, 2024.
- [2] M. Tentori, N. Weibel, K. Van Laerhoven, and Z. Zhou. *ISWC '23: Proceedings of the 2023 ACM International Symposium on Wearable Computers*. Association for Computing Machinery, New York, NY, USA, 2023.
- [3] M. Tentori, N. Weibel, K. Van Laerhoven, and Z. Zhou. *UbiComp/ISWC '23 Adjunct: Adjunct Proceedings of the 2023 ACM International Joint Conference on Pervasive and Ubiquitous Computing & the 2023 ACM International Symposium on Wearable Computing*. Association for Computing Machinery, New York, NY, USA, 2023.
- [4] M. Tentori, N. Weibel, K. Van Laerhoven, G. Abowd, and F. Salim. *UbiComp-ISWC '20: Adjunct Proceedings of the 2020 ACM International Joint Conference on Pervasive and Ubiquitous Computing and Proceedings of the 2020 ACM International Symposium on Wearable Computers*. Association for Computing Machinery, New York, NY, USA, 2020.
- [5] N. Minsky, V. Osmani, N. Weibel, K. Wac, and L. Li. *PervasiveHealth '18: Proceedings of the 12th EAI International Conference on Pervasive Computing Technologies for Healthcare*. ACM, New York, NY, USA, 2018.
- [6] N. Weibel and J. Favela. *PervasiveHealth '16: Proceedings of the 10th EAI International Conference on Pervasive Computing Technologies for Healthcare*. ACM, Cancun, Mexico, 2016.
- [7] J. Kerr, N. Weibel, and C. Gurrin. *SenseCam '13: Proceedings of the 4th International SenseCam & Pervasive Imaging Conference*. ACM, New York, NY, USA, 2013.

Peer-Reviewed Papers in Conference Proceedings

- [8] R. Kaufman, A. Broukhim, D. Kirsh, and N. Weibel. What did my car say? Impact of autonomous vehicle explanation errors and driving context on comfort, reliance, satisfaction, and driving confidence. In *Proc. CHI 2025, SIGCHI Conf. Hum. Factor. Comput. Syst.*, 2025.
- [9] R. Kaufman, E. Lee, M. S. Bedmutha, D. Kirsh, and N. Weibel. Predicting trust in autonomous vehicles: Modeling young adult psychosocial traits, risk-benefit attitudes, and driving factors with machine learning. In *Proc. CHI 2025, SIGCHI Conf. Hum. Factor. Comput. Syst.*, 2025.

- [10] Matin Yarmand, Udayan Tandon, Courtney N. Reed, Eric B. Hekler, Nadir Weibel, and April Yi Wang. Dialogic and On-Demand Metaphors for Interdisciplinary Reading. In *Proc. CHI 2025, SIGCHI Conf. Hum. Factor. Comput. Syst.*, 2025.
- [11] M. Yarmand, Haowei Li, and Nadir Weibel. Interactions Beyond the Pandemic: Lessons Learned from Higher Education Classrooms during Large-scale Emergency Remote Teaching. In *Proc. CHI 2025, SIGCHI Conf. Hum. Factor. Comput. Syst.*, 2025.
- [12] E. Bascom, R. Casanova-Perez, K. Tobar, M. S. Bedmutha, H. Ramaswamy, W. Pratt, J. Sabin, B. Wood, N. Weibel, and A. Hartzler. Designing Communication Feedback Systems To Reduce Healthcare Providers' Implicit Biases In Patient Encounters. In *Proceedings of the CHI Conference on Human Factors in Computing Systems*, pages 1–12, 2024.
- [13] M. S. Bedmutha, A. Tsedenbal, K. Tobar, S. Borsotto, K. R. Sladek, D. Singh, R. Casanova-Perez, E. Bascom, B. Wood, J. Sabin, W. Pratt, A. Hartzler, and N. Weibel. ConverSense: An Automated Approach to Assess Patient-Provider Interactions using Social Signals. In *Proceedings of the CHI Conference on Human Factors in Computing Systems*, pages 1–22, 2024.
- [14] M. Yarmand, C. Chen, K. Cheng, J. Murphy, and N. Weibel. "I'd be watching him contour till 10 o'clock at night": Understanding Tensions between Teaching Methods and Learning Needs in Healthcare Apprenticeship. In *Proceedings of the CHI Conference on Human Factors in Computing Systems*, pages 1–19, 2024.
- [15] M. Yarmand, C. Chen, M. V. Sherer, Y. N. Shah, P. Liu, B. Wang, L. Hernandez, J. D. Murphy, and N. Weibel. Enhancing accuracy, time spent, and ubiquity in critical healthcare delineation via cross-device contouring. In *Designing Interactive Systems Conference*, pages 905–919, New York, NY, USA, 2024. ACM.
- [16] M. Yarmand, R. Wang, H. Li, and N. Weibel. Evaluating video conferencing and desktop virtual platforms for supporting remote classroom activities. In *Proceedings of the 17th International Conference on Computer-Supported Collaborative Learning-CSCL 2024*, pp. 407-408. International Society of the Learning Sciences, 2024.
- [17] C. Chen, E. T. Lifset, Y. Han, A. Roy, M. Hogarth, A. A. Moore, E. Farcas, and N. Weibel. Screen or No Screen? Lessons Learnt from a Real-World Deployment Study of Using Voice Assistants With and Without Touchscreen for Older Adults. In *Proceedings of the 25th International ACM SIGACCESS Conference on Computers and Accessibility*, pages 1–21, 2023.
- [18] C. Chen, C. Nguyen, J. Hoffswell, J. Healey, T. Bui, and N. Weibel. PaperToPlace: Transforming Instruction Documents into Spatialized and Context-Aware Mixed Reality Experiences. In *Proceedings of the 36th Annual ACM Symposium on User Interface Software and Technology*, pages 1–21, 2023.
- [19] J. G. Johnson, T. Sharkey, I. C. Butarbutar, D. Xiong, R. Huang, L. Sy, and N. Weibel. UnMapped: Leveraging Experts' Situated Experiences to Ease Remote Guidance in Collaborative Mixed Reality. In *Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems*, pages 1–20, 2023.
- [20] S. Pei, A. Chen, C. Chen, F. M. Li, M. Fozzard, H.-Y. Chi, N. Weibel, P. Carrington, and Y. Zhang. Embodied Exploration: Facilitating Remote Accessibility Assessment for Wheelchair Users with Virtual Reality. In *Proceedings of the 25th International ACM SIGACCESS Conference on Computers and Accessibility*, pages 1–17, 2023.
- [21] C. Chen, M. Yarmand, V. Singh, M. V. Sherer, J. D. Murphy, Y. Zhang, and N. Weibel. Exploring needs and design opportunities for virtual reality-based contour delineations of medical structures. In *Companion of the 2022 ACM SIGCHI Symposium on Engineering Interactive Computing Systems*, pages 19–25, 2022.

- [22] C. Chen, M. Yarmand, V. Singh, M. V. Sherer, J. D. Murphy, Y. Zhang, and N. Weibel. Vrcontour: Bringing contour delineations of medical structures into virtual reality. In *2022 IEEE International Symposium on Mixed and Augmented Reality (ISMAR)*, pages 64–73. IEEE, 2022.
- [23] C. Chen, M. Yarmand, Z. Xu, V. Singh, Y. Zhang, and N. Weibel. Investigating input modality and task geometry on precision-first 3d drawing in virtual reality. In *2022 IEEE International Symposium on Mixed and Augmented Reality (ISMAR)*, pages 384–393. IEEE, 2022.
- [24] Y. Han, C. B. Han, C. Chen, P. W. Lee, M. Hogarth, A. A. Moore, N. Weibel, and E. Farcas. Towards visualization of time-series ecological momentary assessment (ema) data on standalone voice-first virtual assistants. In *Proceedings of the 24th International ACM SIGACCESS Conference on Computers and Accessibility*, pages 1–4, 2022.
- [25] M. Zhang, W. Liu, N. Weibel, and J. P. Schulze. A directx-based dicom viewer for multi-user surgical planning in augmented reality. In *International Symposium on Visual Computing*, pages 217–228. Springer Nature Switzerland Cham, 2022.
- [26] R. Casanova-Perez, C. Apodaca, E. Bascom, D. Mohanraj, C. Lane, D. Vidyarthi, E. Beneteau, J. Sabin, W. Pratt, N. Weibel, and A. Hartzler. Broken down by bias: Healthcare biases experienced by bipoc and lgbtq+ patients. In *AMIA Annual Symposium Proceedings*, volume 2021, page 275. American Medical Informatics Association, 2021.
- [27] C. Chen, J. G. Johnson, K. Charles, A. Lee, E. T. Lifset, M. Hogarth, A. A. Moore, E. Farcas, and N. Weibel. Understanding barriers and design opportunities to improve healthcare and qol for older adults through voice assistants. In *The 23rd International ACM SIGACCESS Conference on Computers and Accessibility*, pages 1–16, 2021.
- [28] C. Chen, K. Mrini, K. Charles, E. Lifset, M. Hogarth, A. Moore, N. Weibel, and E. Farcas. Toward a unified metadata schema for ecological momentary assessment with voice-first virtual assistants. In *CUI 2021-3rd Conference on Conversational User Interfaces*, pages 1–6, 2021.
- [29] D. Gasques, J. G. Johnson, T. Sharkey, Y. Feng, R. Wang, Z. R. Xu, E. Zavala, Y. Zhang, W. Xie, X. Zhang, K. Davis, M. Yip, and N. Weibel. Artemis: A collaborative mixed-reality system for immersive surgical telementoring. In *Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems*, pages 1–14, 2021.
- [30] J. G. Johnson, D. Gasques, T. Sharkey, E. Schmitz, and N. Weibel. Do you really need to know where “that” is? enhancing support for referencing in collaborative mixed reality environments. In *Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems*, pages 1–14, 2021.
- [31] J. Sabin, N. Weibel, R. Casanova-Perez, C. Emmenegger, W. Pratt, C. Lane, C. Schairer, S. Rick, E. Beneteau, and A. Hartzler. Developing a healthcare equity tool: Combining technology and stakeholder engagement to uncover hidden bias in patient-provider interactions. In *2021 Annual Research Meeting*. AcademyHealth, 2021.
- [32] M. Yarmand, C. Chen, D. Gasques, J. D. Murphy, and N. Weibel. Facilitating remote design thinking workshops in healthcare: the case of contouring in radiation oncology. In *Extended Abstracts of the 2021 CHI Conference on Human Factors in Computing Systems*, pages 1–5, 2021.
- [33] M. Yarmand, J. Solyst, S. Klemmer, and N. Weibel. “It Feels Like I am Talking into a Void”: Understanding Interaction Gaps in Synchronous Online Classrooms. In *Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems*, pages 1–9, 2021.
- [34] V. Ramesh, A. Nguyen, L. Grega, K. Agrawal, B. C. Meyer, and N. Cauwenberghs, Gert anad Weibel. Assessing clinicians’ reliance on computational aids for acute stroke diagnosis. In *Proceedings of the 14th EAI International Conference on Pervasive Computing Technologies for Healthcare, PervasiveHealth’20*, 2020.

- [35] J. Johnson, E. Schmitz, V. Ramnath, and N. Weibel. Nurture-empower-support: A human-centered approach to understand and support icu families. In *Proceedings of the 13th EAI International Conference on Pervasive Computing Technologies for Healthcare*, PervasiveHealth'19, pages 119–128, New York, NY, USA, 2019. ACM.
- [36] J. G. Johnson, D. G. Rodrigues, M. Gubbala, and N. Weibel. HoloCPR: Designing and Evaluating a Mixed Reality Interface for Time-Critical Emergencies. In *Proceedings of the 12th EAI International Conference on Pervasive Computing Technologies for Healthcare*, PervasiveHealth '18, pages 67–76, New York, NY, USA, 2018. ACM. event-place: New York, NY, USA.
- [37] V. Ramesh, K. Agrawal, B. Meyer, G. Cauwenberghs, and N. Weibel. Stroke-Associated Hemiparesis Detection Using Body Joints and Support Vector Machines. In *Proceedings of the 12th EAI International Conference on Pervasive Computing Technologies for Healthcare*, PervasiveHealth '18, pages 55–58, New York, NY, USA, 2018. ACM.
- [38] Y. Vaizman, K. Ellis, G. Lanckriet, and N. Weibel. ExtraSensory App: Data Collection In-the-Wild with Rich User Interface to Self-Report Behavior. In *Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems*, CHI '18, pages 554:1–554:12, New York, NY, USA, 2018. ACM.
- [39] N. Weibel, P. Desai, L. Saul, A. Gupta, and S. Little. HIV Risk on Twitter: the Ethical Dimension of Social Media Evidence-based Prevention for Vulnerable Populations. In *Proceedings of HICSS-50, Hawaii International Conference on System Sciences*, Big Island, HI, USA, January 2017.
- [40] B. Balaji, J. Koh, N. Weibel, and Y. Agarwal. Genie: A Longitudinal Study Comparing Physical and Software Thermostats in Office Buildings. In *Proceedings of the 2016 ACM International Joint Conference on Pervasive and Ubiquitous Computing*, UbiComp '16, pages 1200–1211, New York, NY, USA, 2016. ACM.
- [41] F. L. Cibrian, N. Weibel, and M. Tentori. Collective Use of a Fabric-based Interactive Surface to Support Early Development in Toddler Classrooms. In *Proceedings of the 2016 ACM International Joint Conference on Pervasive and Ubiquitous Computing*, UbiComp '16, pages 328–339, New York, NY, USA, 2016. ACM.
- [42] M. Hussain, J. Dewey, and N. Weibel. Mitigating Medical Alarm Fatigue with Cognitive Heuristics. In *Proceedings of the 10th EAI International Conference on Pervasive Computing Technologies for Healthcare*, PervasiveHealth '16, pages 178–185, ICST, Brussels, Belgium, Belgium, 2016. ICST (Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering).
- [43] N. Weibel, S.-O. Hwang, S. Rick, E. Sayyari, D. Lenzen, and J. Hollan. Hands That Speak: An Integrated Approach to Studying Complex Human Communicative Body Movements. In *Proceedings of the 2016 49th Hawaii International Conference on System Sciences (HICSS)*, HICSS '16, pages 610–619, Washington, DC, USA, 2016. IEEE Computer Society.
- [44] N. Thangarajan, N. Green, A. Gupta, S. Little, and N. Weibel. Analyzing Social Media to Characterize Local HIV At-risk Populations. In *Proceedings of the Conference on Wireless Health*, WH '15, pages 11:1–11:8, New York, NY, USA, 2015. ACM.
- [45] D. S. Kusunoki, A. Sarcevic, N. Weibel, I. Marsic, Z. Zhang, G. Tuveson, and R. S. Burd. Balancing Design Tensions: Iterative Display Design to Support Ad Hoc and Multidisciplinary Medical Teamwork. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, CHI '14, pages 3777–3786, New York, NY, USA, 2014. ACM.
- [46] E. Tanuwidjaja, D. Huynh, K. Koa, C. Nguyen, C. Shao, P. Torbett, C. Emmenegger, and N. Weibel. Chroma: A Wearable Augmented-reality Solution for Color Blindness. In *Proceedings of the 2014 ACM International Joint Conference on Pervasive and Ubiquitous Computing*, UbiComp '14, pages 799–810, New York, NY, USA, 2014. ACM.

- [47] A. Fouse, N. Weibel, C. Johnson, and J. D. Hollan. Reifying Social Movement Trajectories. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, CHI '13, pages 2945–2948, New York, NY, USA, 2013. ACM.
- [48] J. Lyons, R. Dixit, C. Emmenegger, L. H. Hill, N. Weibel, and J. D. Hollan. Factors Affecting Physician-Patient Communication in the Medical Exam Room. In *Proceedings of HCI International 2013, 15th International Conference on Human-Computer Interaction*, pages 187–191, Las Vegas, NV, USA, 2013.
- [49] A. M. Piper, N. Weibel, and J. Hollan. Audio-enhanced Paper Photos: Encouraging Social Interaction at Age 105. In *Proceedings of the 2013 Conference on Computer Supported Cooperative Work*, CSCW '13, pages 215–224, New York, NY, USA, 2013. ACM.
- [50] N. Weibel, C. Emmenegger, J. Lyons, R. Dixit, L. L. Hill, and J. D. Hollan. Interpreter-mediated Physician-patient Communication: Opportunities for Multimodal Healthcare Interfaces. In *Proceedings of the 7th International Conference on Pervasive Computing Technologies for Healthcare*, PervasiveHealth '13, pages 113–120, ICST, Brussels, Belgium, Belgium, 2013. ICST (Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering).
- [51] M. Hong, A. M. Piper, N. Weibel, S. Olberding, and J. Hollan. Microanalysis of Active Reading Behaviors to Inform Design of Interactive Desktop Workspaces. In *Proc. ITS 2012, ACM Interactive Tabletops and Surfaces Conference*, pages 215–224, November 2012.
- [52] A. Sarcevic, N. Weibel, J. D. Hollan, and R. Burd. TraumaPen: A Paper-Digital Interface for Information Capture and Display in Time-Critical Medical Work. In *Proc. Pervasive Health 2012, International Conference on Pervasive Computing Technologies for Healthcare*, pages 17–24, May 2012.
- [53] A. M. Piper, N. Weibel, and J. Hollan. TAP & PLAY: An End-user Toolkit for Authoring Interactive Pen and Paper Language Activities. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, CHI '12, pages 149–158, New York, NY, USA, 2012. ACM.
- [54] A. Satyanarayan, N. Weibel, and J. Hollan. Using Overlays to Support Collaborative Interaction with Display Walls. In *Proceedings of the 2012 ACM International Conference on Intelligent User Interfaces*, IUI '12, pages 105–108, New York, NY, USA, 2012. ACM.
- [55] N. Weibel, A. Fouse, C. Emmenegger, W. Friedman, E. Hutchins, and J. Hollan. Digital Pen and Paper Practices in Observational Research. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, CHI '12, pages 1331–1340, New York, NY, USA, 2012. ACM.
- [56] N. Weibel, A. Fouse, C. Emmenegger, S. Kimmich, and E. Hutchins. Let's Look at the Cockpit: Exploring Mobile Eye-tracking for Observational Research on the Flight Deck. In *Proceedings of the Symposium on Eye Tracking Research and Applications*, ETRA '12, pages 107–114, New York, NY, USA, 2012. ACM.
- [57] L. G. Cowan, N. Weibel, L. R. Pina, J. D. Hollan, and W. G. Griswold. Ubiquitous Sketching for Social Media. In *Proceedings of the 13th International Conference on Human Computer Interaction with Mobile Devices and Services*, MobileHCI '11, pages 395–404, New York, NY, USA, 2011. ACM.
- [58] N. Weibel, A. Fouse, E. Hutchins, and J. D. Hollan. Supporting an Integrated Paper-digital Workflow for Observational Research. In *Proceedings of the 16th International Conference on Intelligent User Interfaces*, IUI '11, pages 257–266, New York, NY, USA, 2011. ACM.
- [59] N. Weibel, B. Signer, M. C. Norrie, H. Hofstetter, H.-C. Jetter, and H. Reiterer. PaperSketch: A Paper-digital Collaborative Remote Sketching Tool. In *Proceedings of the 16th International Conference on Intelligent User Interfaces*, IUI '11, pages 155–164, New York, NY, USA, 2011. ACM.

- [60] A. M. Piper, N. Weibel, and J. D. Hollan. Introducing Multimodal Paper-digital Interfaces for Speech-language Therapy. In *Proceedings of the 12th International ACM SIGACCESS Conference on Computers and Accessibility*, ASSETS '10, pages 203–210, New York, NY, USA, 2010. ACM.
- [61] C. Decurtins, M. C. Norrie, E. Reuss, and N. Weibel. AwareNews - A Context-Aware Peripheral News and Awareness Display. In *Proc. IE 2008, 4th International Conference on Intelligent Environments*, pages 1–8, Seattle, WA, USA, July 2008.
- [62] M. C. Norrie, B. Signer, and N. Weibel. Interactive Paper As a Reading Medium in Digital Libraries. In *Proceedings of the 12th European Conference on Research and Advanced Technology for Digital Libraries*, ECDL '08, pages 232–243, Berlin, Heidelberg, 2008. Springer-Verlag.
- [63] M. Grossniklaus, M. C. Norrie, B. Signer, and N. Weibel. Producing Interactive Paper Documents Based on Multi-Channel Content Publishing. In *Proceedings of the Third International Conference on Automated Production of Cross Media Content for Multi-Channel Distribution*, AXMEDIS '07, pages 89–96, Washington, DC, USA, 2007. IEEE Computer Society.
- [64] N. Weibel, M. C. Norrie, and B. Signer. A Model for Mapping Between Printed and Digital Document Instances. In *Proceedings of the 2007 ACM Symposium on Document Engineering*, DocEng '07, pages 19–28, New York, NY, USA, 2007. ACM.
- [65] M. Grossniklaus, M. C. Norrie, B. Signer, and N. Weibel. Putting Location-based Services on the Map. In *Proceedings of the 6th International Conference on Web and Wireless Geographical Information Systems*, W2GIS'06, pages 1–11, Berlin, Heidelberg, 2006. Springer-Verlag.
- [66] M. C. Norrie, B. Signer, and N. Weibel. Print-n-link: Weaving the Paper Web. In *Proceedings of the 2006 ACM Symposium on Document Engineering*, DocEng '06, pages 34–43, New York, NY, USA, 2006. ACM.
- [67] A. Lombardoni, M. C. Norrie, N. Weibel, A. Vogelsang, and M. Althaus. A Systematic Approach to the Development of E-Commerce Sites for Mass Customization. In *Proc. IEEE '05, IEEE International Conference on e-Technology, e-Commerce and e-Service*, pages 246–249, Hong Kong, China, March 2005.

Journal Articles

- [68] J. A. Rode, L. A. Castro, V. Viswanath, M. C. Valdez Gastelum, A. Mashhadi, M. Tentori, K. Van Laerhoven, and N. Weibel. Justice, Equity, Diversity, and Inclusion at UbiComp/ISWC: Best Practices for Accessible and Equitable Computing Conferences. *Commun. ACM*, January 2025. Online First.
- [69] M. S. Bedmutha, E. E. Bascom, K. R. Sladek, K. Tobar, R. Casanova-Perez, A. Andreiu, A. Bhat, S. Mangal, B. Wood, J. Sabin, W. Pratt, N. Weibel, and A. Hartzler. Artificial intelligence-generated feedback on social signals in patient–provider communication: technical performance, feedback usability, and impact. *JAMIA Open*, 7(4):ooae106, October 2024.
- [70] C. Chen, C. Nguyen, T. Groueix, V. G. Kim, and N. Weibel. MemoVis: A GenAI-powered tool for creating companion reference images for 3D design feedback. *ACM Trans. Comput. Hum. Interact.*, 31(5):1–41, October 2024.
- [71] M. E. Orr, E. A. M. Duran, B. Wang, M. Yarmand, L. A. D'Souza, N. Weibel, E. F. Gillespie, J. D. Murphy, and M. Sherer. Patterns of contouring mistakes in the novice resident: A qualitative analysis to guide future educational efforts. *Int. J. Radiat. Oncol. Biol. Phys.*, 120(2):S168, October 2024.
- [72] N. Weibel, B. Alwood, V. Ramesh, W. Liu, D. M. Meyer, T. McQuaid, E. S. Germain, and B. C. Meyer. Holo-Stroke: Assessing for immersive Stroke care through Stroke hologram teleportation. *Telemed. J. E. Health.*, 30(10):2583–2591, October 2024.

- [73] E. T. Lifset, K. Charles, E. Farcas, N. Weibel, M. Hogarth, C. Chen, J. G. Johnson, M. Draper, A. L. Nguyen, and A. A. Moore. Ascertaining Whether an Intelligent Voice Assistant Can Meet Older Adults' Health-Related Needs in the Context of a Geriatrics 5Ms Framework. *Gerontology and Geriatric Medicine*, 9:23337214231201138, 2023.
- [74] M. Orr, A. Dornisch, E. Duran, M. Yarmand, B. Wang, N. Weibel, E. Gillespie, J. Murphy, and M. Sherer. Results From a Multi-Institutional Pilot Study of iContour, an Interactive Online Platform with Real-Time Feedback to Improve Contouring Education for Radiation Oncology Residents. *International Journal of Radiation Oncology, Biology, Physics*, 117(2):e536–e537, 2023.
- [75] Evaluating Accuracy, Completion Time and Usability of Everyday Touch Devices for Contouring, author=Yarmand, Matin and Sherer, Michael and Chen, Chen and Hernandez, Larry and Weibel, Nadir and Murphy, James D. *International Journal of Radiation Oncology, Biology, Physics*, 114(3):S96, 2022.
- [76] C. Apodaca, R. Casanova-Perez, E. Bascom, D. Mohanraj, C. Lane, D. Vidyarthi, E. Beneteau, J. Sabin, W. Pratt, N. Weibel, et al. Maybe they had a bad day: how LGBTQ and BIPOC patients react to bias in healthcare and struggle to speak out. *Journal of the American Medical Informatics Association*, 29(12):2075–2082, 2022.
- [77] S. J. Mansour-Assi, N. M. Golaszewski, V. L. Costello, D. Wing, H. Persinger, A. Coleman, L. Lytle, B. A. Larsen, S. Jain, N. Weibel, et al. Social Mobile Approaches to Reducing Weight (SMART) 2.0: protocol of a randomized controlled trial among young adults in university settings. *Trials*, 23(1):1–14, 2022.
- [78] M. D. Tadlock, E. J. Olson, D. Gasques, R. Champagne, M. J. Krzyzaniak, S. A. Belverud, V. Ravindra, J. Kerns, P. M. Choi, J. Deveraux, et al. Mixed reality surgical mentoring of combat casualty care related procedures in a perfused cadaver model: Initial results of a randomized feasibility study. *Surgery*, 172(5):1337–1345, 2022.
- [79] J. Harlow, N. Weibel, R. Al Kotob, V. Chan, C. Bloss, R. Linares-Orozco, M. Takemoto, and C. Nebeker. Using participatory design to inform the connected and open research ethics (core) commons. *Science and engineering ethics*, 26(1):183–203, 2020.
- [80] W. Xie, Y. Liang, J. Johnson, A. Mower, S. Burns, C. Chelini, P. D. Alessandro, N. Weibel, and J. P. Schulze. Interactive multi-user 3d visual analytics in augmented reality. *arXiv preprint arXiv:2002.05305*, 2020.
- [81] J. Harlow, N. Weibel, R. A. Kotob, V. Chan, C. Bloss, R. Linares-Orozco, M. Takemoto, and C. Nebeker. Using Participatory Design to Inform the Connected and Open Research Ethics (CORE) Commons. *Science and Engineering Ethics*, 2019.
- [82] M. Hoenigl, S. J. Little, D. Grelotti, B. Skaathun, G. A. Wagner, N. Weibel, J. K. Stockman, and D. M. Smith. Grindr users take more risks, but are more open to human immunodeficiency virus (hiv) pre-exposure prophylaxis: Could this dating app provide a platform for hiv prevention outreach? *Clinical Infectious Diseases*, 2019.
- [83] A. Sarvghad, B. Saket, A. Endert, and N. Weibel. Embedded Merge & Split: Visual Adjustment of Data Grouping. *IEEE transactions on visualization and computer graphics*, August 2018.
- [84] R. L. Street, L. Liu, N. J. Farber, Y. Chen, A. Calvitti, N. Weibel, M. T. Gabuzda, K. Bell, B. Gray, S. Rick, S. Ashfaq, and Z. Agha. Keystrokes, Mouse Clicks, and Gazing at the Computer: How Physician Interaction with the EHR Affects Patient Participation. *Journal of General Internal Medicine*, 33(4):423–428, April 2018.
- [85] S. Dunseath, N. Weibel, C. S. Bloss, and C. Nebeker. NIH support of mobile, imaging, pervasive sensing, social media and location tracking (MISST) research: laying the foundation to examine research ethics in the digital age. *npj Digital Medicine*, 1(1):20171, January 2018.

- [86] Y. Vaizman, N. Weibel, and G. Lanckriet. Context Recognition In-the-Wild: Unified Model for Multi-Modal Sensors and Multi-Label Classification. *Proc. ACM Interact. Mob. Wearable Ubiquitous Technol.*, 1(4):168:1–168:22, January 2018.
- [87] C. Nebeker, J. Harlow, R. Espinoza Giacinto, R. Orozco-Linares, C. S. Bloss, and N. Weibel. Ethical and regulatory challenges of research using pervasive sensing and other emerging technologies: IRB perspectives. *AJOB empirical bioethics*, 8(4):266–276, December 2017.
- [88] J. Calderon, G. X. Ayala, J. P. Elder, G. E. Belch, I. A. Castro, N. Weibel, and J. Pickrel. What Happens When Parents and Children Go Grocery Shopping? An Observational Study of Latino Dyads in Southern California, USA. *Health Education & Behavior: The Official Publication of the Society for Public Health Education*, 44(1):5–12, 2017.
- [89] A. Calvitti, H. Hochheiser, S. Ashfaq, K. Bell, Y. Chen, R. El Kareh, M. T. Gabuzda, L. Liu, S. Mortensen, B. Pandey, S. Rick, R. L. Street, N. Weibel, C. Weir, and Z. Agha. Physician activity during outpatient visits and subjective workload. *Journal of Biomedical Informatics*, 69:135–149, 2017.
- [90] M. Hussain, J. Dewey, and N. Weibel. Reducing alarm fatigue: exploring decision structures, risks, and design. *EAI Endorsed Transactions on Pervasive Health and Technology*, 17(10), 2017.
- [91] G. Merchant, N. Weibel, L. Pina, W. G. Griswold, J. H. Fowler, G. X. Ayala, L. C. Gallo, J. Hollan, and K. Patrick. Face-to-Face and Online Networks: College Students' Experiences in a Weight-Loss Trial. *Journal of Health Communication*, 22(1):75–83, 2017.
- [92] C. Bloss, C. Nebeker, M. Bietz, D. Bae, B. Bigby, M. Devereaux, J. Fowler, A. Waldo, N. Weibel, K. Patrick, S. Klemmer, and L. Melichar. Reimagining Human Research Protections for 21st Century Science. *Journal of Medical Internet Research*, 18(12):e329, 2016.
- [93] A. Chaillon, M. Hoenigl, S. R. Mehta, N. Weibel, S. J. Little, and D. M. Smith. A practical online tool to estimate antiretroviral coverage for HIV infected and susceptible populations needed to reduce local HIV epidemics. *Scientific Reports*, 6:28707, 2016.
- [94] M. Hoenigl, N. Weibel, S. R. Mehta, C. M. Anderson, J. Jenks, N. Green, S. Gianella, D. M. Smith, and S. J. Little. Development and validation of the San Diego Early Test Score to predict acute and early HIV infection risk in men who have sex with men. *Clinical Infectious Diseases: An Official Publication of the Infectious Diseases Society of America*, 61(3):468–475, August 2015.
- [95] E. Grenader, D. Gasques Rodrigues, F. Nos, and N. Weibel. The VideoMob Interactive Art Installation Connecting Strangers Through Inclusive Digital Crowds. *ACM Trans. Interact. Intell. Syst.*, 5(2):7:1–7:31, July 2015.
- [96] N. Weibel, S. Rick, C. Emmenegger, S. Ashfaq, A. Calvitti, and Z. Agha. LAB-IN-A-BOX: Semi-automatic Tracking of Activity in the Medical Office. *Personal Ubiquitous Comput.*, 19(2):317–334, February 2015.
- [97] A. Rule, S. Rick, M. Chiu, P. Rios, S. Ashfaq, A. Calvitti, W. Chan, N. Weibel, and Z. Agha. Validating free-text order entry for a note-centric EHR. *AMIA ... Annual Symposium proceedings. AMIA Symposium*, 2015:1103–1110, 2015.
- [98] A. Calvitti, H. Hochheiser, N. Weibel, L. Liu, K. Zheng, C. Weir, S. Ashfaq, S. Rick, Z. Agha, and B. Gray. Can eye tracking and EHR mouse activity tell us when clinicians are overloaded? *Human Factors Quarterly, Veteran Health Administration*, September 2014.
- [99] B. Signer, M. C. Norrie, N. Weibel, and A. Ispas. Advanced Authoring of Paper-digital Systems. *Multimedia Tools Appl.*, 70(2):1309–1332, May 2014.
- [100] G. Merchant, N. Weibel, K. Patrick, J. H. Fowler, G. J. Norman, A. Gupta, C. Servetas, K. Calfas, K. Raste, and L. Pina. Click "like" to change your behavior: a mixed methods study of college

students' exposure to and engagement with Facebook content designed for weight loss. *Journal of medical Internet research*, 16(6), 2014.

- [101] A. M. Piper, N. Weibel, and J. D. Hollan. Designing audio-enhanced paper photos for older adult emotional wellbeing in communication therapy. *International Journal of Human-Computer Studies*, 72(8-9):629–639, 2014.
- [102] E. Hutchins, N. Weibel, C. Emmenegger, and A. Fouse. An Integrative Approach to Understanding Flight Crew Activity. *Journal of Cognitive Engineering and Decision Making*, 7(4):352–376, July 2013.
- [103] L. G. Cowan, N. Weibel, W. G. Griswold, L. R. Pina, and J. D. Hollan. Projector Phone Use: Practices and Social Implications. *Personal Ubiquitous Comput.*, 16(1):53–63, January 2012.
- [104] A. M. Piper, N. Weibel, and J. D. Hollan. Write-N-Speak: Authoring Multimodal Digital-Paper Materials for Speech-Language Therapy. *ACM Trans. Access. Comput.*, 4(1):2:1–2:20, November 2011.
- [105] L. Gabutti, F. Nobile, V. Forni, F. Rigamonti, N. Weibel, and M. Burnier. Development of an erythropoietin prescription simulator to improve abilities for the prescription of erythropoietin stimulating agents: is it feasible? *BMC nephrology*, 12:11, February 2011.
- [106] M. C. Norrie, B. Signer, M. Grossniklaus, R. Belotti, C. Decurtins, and N. Weibel. Context-aware Platform for Mobile Data Management. *Wirel. Netw.*, 13(6):855–870, December 2007.

Peer-Reviewed Abstracts, Posters and Demos

- [107] M. S. Bedmutha, S. Karumudi, K. Patrick, H. Rataj, and N. Weibel. Exploring user willingness towards mobile sensing and intervention: A case study on mental health of undergraduate college students. In *Companion of the 2024 on ACM International Joint Conference on Pervasive and Ubiquitous Computing*, pages 721–728, New York, NY, USA, October 2024. ACM.
- [108] F. Chen, M. S. Bedmutha, R.-Y. Chung, J. Sabin, W. Pratt, B. R. Wood, N. Weibel, A. L. Hartzler, and T. Cohen. Toward automated detection of biased social signals from the content of clinical conversations. *AMIA Annu. Symp. Proc.*, 2024.
- [109] M. Bedmutha, E. Bascom, K. Sladek, A. Andreiu, B. Wood, W. Pratt, J. Sabin, A. Hartzler, and N. Weibel. Extracting meaningful social signals associated with bias from patient-provider interactions to improve patient care. In *2023 Annual Research Meeting*. AcademyHealth, 2023.
- [110] M. S. Bedmutha, P. S. Bedmutha, and N. Weibel. Privacy-aware respiratory symptom detection in-the-wild. In *Adjunct Proceedings of the 2023 ACM International Joint Conference on Pervasive and Ubiquitous Computing & the 2023 ACM International Symposium on Wearable Computing*, pages 428–432, 2023.
- [111] C. Chen, E. T. Lifset, Y. Han, A. Roy, M. Hogarth, A. A. Moore, E. Farcas, and N. Weibel. How do older adults set up voice assistants? lessons learned from a deployment experience for older adults to set up standalone voice assistants. In *Companion Publication of the 2023 ACM Designing Interactive Systems Conference*, pages 164–168, 2023.
- [112] C. Yang, L. Coney, D. Mohanraj, R. Casanova-Perez, E. Bascom, N. Efrem, J. T. Garcia, J. Sabin, W. Pratt, N. Weibel, et al. Imagining improved interactions: Patients' designs to address implicit bias. In *AMIA Annual Symposium Proceedings*, volume 2023, page 774. American Medical Informatics Association, 2023.
- [113] C. Yang, L. Coney, D. Mohanraj, R. Casanova-Perez, E. Bascom, N. Efrem, J. T. Garcia, J. Sabin, W. Pratt, N. Weibel, and A. L. Hartzler. Imagining improved interactions: Patients' designs to address implicit bias. *AMIA Annu. Symp. Proc.*, 2023:774–783, 2023.
- [114] M. Yarmand, B. Wang, C. Chen, M. Sherer, L. Hernandez, J. Murphy, and N. Weibel. Design and development of a training and immediate feedback tool to support healthcare apprenticeship.

In *Extended Abstracts of the 2023 CHI Conference on Human Factors in Computing Systems*, pages 1–7, 2023.

- [115] L. Dirks, E. Beneteau, J. Sabin, W. Pratt, C. Lane, E. Bascom, R. Casanova-Perez, N. Rizvi, N. Weibel, and A. Hartzler. Battling bias in primary care encounters: Informatics designs to support clinicians. In *CHI Conference on Human Factors in Computing Systems Extended Abstracts*, pages 1–9, 2022.
- [116] D. Gasques, W. Liu, and N. Weibel. The Virtual-Augmented Reality Simulator: Evaluating OST-HMD AR calibration algorithms in VR. In *2022 IEEE Conference on Virtual Reality and 3D User Interfaces Abstracts and Workshops (VRW)*, pages 702–703. IEEE, 2022.
- [117] K. R. Sladek, A. Andreiu, S. R. Rick, C. E. Schair, W. Pratt, J. A. Sabin, A. L. Hartzler, and N. Weibel. Using the Roter Interaction Analysis Scale (RIAS) with Positive and Negative Affect Scores to Signal Pivotal Moments in Patient-Provider Interactions. In *AMIA Annual Symposium*, 2022.
- [118] C. Yang, D. Mohanraj, A. Dogbe, A. Idris, J. Tan Garcia, L. J. Chastine, E. Bascom, J. Sabin, R. Casanova-Perez, W. Pratt, N. Weibel, and A. Hartzler. Community champions as health informatics partners in co-production. In *AMIA Annual Symposium*, 2022.
- [119] M. Yarmand, M. V. Sherer, C. Chen, L. Hernandez, N. Weibel, and J. Murphy. Evaluating Accuracy, Completion Time, and Usability of Everyday Touch Devices for Contouring. In *Annual Meeting Scientific Program Committee of the American Society for Radiation Oncology (ASTRO)*, San Antonio, TX, 2022.
- [120] K. Charles, C. Chen, J. Johnson, A. Lee, E. Lifset, M. Hogarth, N. Weibel, E. Farcas, and A. Moore. How might an intelligent voice assistant address older adults' health-related needs? In *Journal of the American Geriatrics Society*, volume 69, pages S243–S244, 2021.
- [121] E. Labin, D. M. Meyer, V. Ramesh, N. Weibel, K. Agrawal, and B. C. Meyer. Abstract p307: The alpha sign in the diagnosis of potential stroke. *Stroke*, 52(Suppl_1):AP307–AP307, 2021.
- [122] V. Ramesh, S. Kim, H.-A. Nguyen, K. Agrawal, B. C. Meyer, and N. Weibel. Developing aids to assist acute stroke diagnosis. In *Extended Abstracts of the 2020 CHI Conference on Human Factors in Computing Systems*, pages 1–7, 2020.
- [123] N. Weibel, J. Johnson, T. Sharkey, Z. R. Xu, E. Zavala, K. Davis, D. Gasques, X. Zhang, and M. Yip. Artemis: Mixed-reality environment for immersive surgical telementoring. In *Extended Abstracts of the 2020 CHI Conference on Human Factors in Computing Systems*, pages 1–4, 2020.
- [124] D. Gasques, J. Johnson, T. Sharkey, and N. Weibel. What You Sketch Is What You Get: Quick and Easy Augmented Reality Prototyping with PintAR. In *Proceedings of the 2019 CHI Conference Extended Abstracts on Human Factors in Computing Systems*, CHI EA '19, New York, NY, USA, 2019. ACM. Poster.
- [125] D. Gasques, J. G. Johnson, T. Sharkey, and N. Weibel. Pintar: Sketching spatial experiences in augmented reality. In *Companion Publication of the 2019 on Designing Interactive Systems Conference 2019 Companion*, DIS '19 Companion, pages 17–20, New York, NY, USA, 2019. ACM.
- [126] L. Grega, N. Weibel, S. Assi, N. Golaszewski, E. Hekler, and J. Godino. SMART 2.0: A Multi-modal Weight Loss Intervention for Young Adults. In *Proceedings of the 2019 CHI Conference Extended Abstracts on Human Factors in Computing Systems*, CHI EA '19, New York, NY, USA, 2019. ACM. Poster.
- [127] J. Johnson, E. Schmitz, R. Venkatesh, and N. Weibel. Designing Family-Centered Aids for the Intensive Care Unit. In *Proceedings of the 2019 CHI Conference Extended Abstracts on Human Factors in Computing Systems*, CHI EA '19, New York, NY, USA, 2019. ACM. Poster.

- [128] S. R. Rick, S. Bhaskaran, Y. Sun, S. McEwen, and N. Weibel. NeuroPose: Geriatric Rehabilitation in the Home Using a Webcam and Pose Estimation. In *Proceedings of the 24th International Conference on Intelligent User Interfaces: Companion*, IUI '19, pages 105–106, New York, NY, USA, 2019. ACM.
- [129] S. R. Rick, A. P. Goldberg, and N. Weibel. SleepBot: Encouraging Sleep Hygiene Using an Intelligent Chatbot. In *Proceedings of the 24th International Conference on Intelligent User Interfaces: Companion*, IUI '19, pages 107–108, New York, NY, USA, 2019. ACM.
- [130] A. Vovk, D. Gasques Rodrigues, F. Wild, and N. Weibel. SIG: Spatiality of Augmented Reality User Interfaces. In *Extended Abstracts of the 2019 CHI Conference on Human Factors in Computing Systems*, CHI EA '19, pages SIG02:1–SIG02:4, New York, NY, USA, 2019. ACM.
- [131] N. Weibel, K. Unertl, and S. Boll. WISH Symposium - Workgroup on Interactive Systems in Healthcare. In *Extended Abstracts of the 2019 CHI Conference on Human Factors in Computing Systems*, CHI EA '19, pages Sym01:1–Sym01:8, New York, NY, USA, 2019. ACM.
- [132] S. Dunseath, N. Weibel, C. Bloss, and C. Nebeker. NIH Support of Mobile, Imaging, pervasive Sensing, Social media and location Tracking (MISST) Research: Laying the Foundation to Examine Research Ethics in the Digital Age. In *Proceedings of the 2017 Society of Behavioral Medicine Annual Meeting (Poster presentation)*, San Diego, CA, USA, March 2017. Poster.
- [133] D. Gasques Rodrigues, A. Jain, S. R. Rick, L. Shangle, P. Suresh, and N. Weibel. Exploring Mixed Reality in Specialized Surgical Environments. In *Proceedings of the 2017 CHI Conference Extended Abstracts on Human Factors in Computing Systems*, CHI EA '17, pages 2591–2598, New York, NY, USA, 2017. ACM. Poster.
- [134] V. Ramesh, K. Agrawal, B. Meyer, G. Cauwenberghs, and N. Weibel. Exploring Stroke-associated Hemiparesis Assessment with Support Vector Machines. In *Proceedings of the 11th EAI International Conference on Pervasive Computing Technologies for Healthcare*, PervasiveHealth '17, pages 464–467, New York, NY, USA, 2017. ACM. Poster.
- [135] V. Ramesh, S. Rick, B. Meyer, G. Cauwenberghs, and N. Weibel. A Neurobehavioral Evaluation System Using 3d Depth Tracking & Computer Vision: The Case of Stroke-Kinect. In *Proceedings of Neuroscience 2016, Annual Meeting of the Society for Neuroscience (Poster presentation)*, San Diego, CA, USA, November 2016. Poster.
- [136] A. Rule, E. Gillespie, N. Weibel, and T. Pawlicki. Participatory Design Thinking in Radiation Oncology. In *Proceedings (Posters) of the 2016 International Symposium on Human Factors and Ergonomics in Health Care*, San Diego, USA, April 2016. Poster.
- [137] S.-O. Hwang, S. Rick, E. Sayyari, D. Lenzen, and N. Weibel. The signals of communicative efficiency and linguistic organization: findings from depth sensor skeleton tracking. In *Proceedings (Posters) of TISLR 12, 12th Theoretical Issues in Sign Language Research Conference*, Melbourne, Australia, January 2016. Poster.
- [138] F. L. Cibrán, M. Tentori, and N. Weibel. A Musical Interactive Surface to Support the Multi-sensory Stimulation of Children. In *Proceedings of the 10th EAI International Conference on Pervasive Computing Technologies for Healthcare*, PervasiveHealth '16, pages 241–244, ICST, Brussels, Belgium, Belgium, 2016. ICST (Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering). Poster.
- [139] M. Erhart, A. Nguyen, R. Shivaswamy, B. Anderson, C. Emmenegger, and N. Weibel. Personalized Multimodal Computer Interfaces for the Motor Impaired. In *Proceedings of the 10th EAI International Conference on Pervasive Computing Technologies for Healthcare*, PervasiveHealth '16, pages 211–214, ICST, Brussels, Belgium, Belgium, 2016. ICST (Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering). Poster.

- [140] M. Hussain and N. Weibel. Can DiCoT Improve Infection Control?: A Distributed Cognition Study of Information Flow in Intensive Care. In *Proceedings of the 2016 CHI Conference Extended Abstracts on Human Factors in Computing Systems*, CHI EA '16, pages 2126–2133, New York, NY, USA, 2016. ACM. Poster.
- [141] S. Ashfaq, K. M. Bell, M. Difley, S. Mortensen, K. Avery, S. Rick, N. Weibel, B. Pandey, C. Weir, H. S. Hochheiser, Y. Chen, J. Zhang, K. Zhang, R. Street, M. T. Gabuzda, N. Farber, L. Liu, A. Calvitti, and Z. Agha. Analysis of Computerized Clinical Reminder Activity and Usability Issues. In *Proceedings (Posters) of AMIA 2015, American Medical Informatics Association, Annual Symposium*, San Francisco, USA, November 2015. Poster.
- [142] S. Rick, R. Street, A. Calvitti, S. Ashfaq, Z. Agha, and N. Weibel. Understanding Patient-Physician Communication and Turn-taking Patterns with Directional Microphone Arrays. In *Abstracts (Oral Presentation) of ICCH 2015, International Conference on Communication in Healthcare*, New Orleans, USA, October 2015. Abstract.
- [143] R. Cornejo, N. Weibel, M. Tentori, and J. Favela. Promoting Active Aging with a Paper-based SNS Application. In *Proceedings of the 9th International Conference on Pervasive Computing Technologies for Healthcare*, PervasiveHealth '15, pages 209–212, ICST, Brussels, Belgium, Belgium, 2015. ICST (Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering). Poster.
- [144] S. Rick, A. Calvitti, Z. Agha, and N. Weibel. Eyes on the Clinic: Accelerating Meaningful Interface Analysis Through Unobtrusive Eye Tracking. In *Proceedings of the 9th International Conference on Pervasive Computing Technologies for Healthcare*, PervasiveHealth '15, pages 213–216, ICST, Brussels, Belgium, Belgium, 2015. ICST (Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering). Poster.
- [145] N. Weibel and J. D. Hollan. Gesture and Action Recognition. In *Abstracts of ISGS 2014, International Society of Gestures Studies 6*, San Diego, USA, July 2014. Abstract.
- [146] G. Merchant, L. Pina, M. Black, E. Bales, N. Weibel, W. Griswold, J. Fowler, and K. Patrick. Online and face-to-face: How do ad-hoc and existing networks support weight-related behavior change in young adults? In *Abstracts (Rapid Communication) of SBM 2014, Annual Meeting of the Society of Behavioral Medicine*, Philadelphia, USA, April 2014. Abstract.
- [147] D. Kusunoki, A. Sarcevic, N. Weibel, and R. S. Burd. Opportunities for Blended Interaction in Emergency Rooms: Coupling Displays with Digital Pen Input. In *Proceedings of the 7th International Conference on Pervasive Computing Technologies for Healthcare*, PervasiveHealth '13, pages 288–289, ICST, Brussels, Belgium, Belgium, 2013. ICST (Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering). Poster.
- [148] Y. Liu, N. Weibel, and J. D. Hollan. Interactive Space: A Prototyping Framework for Touch and Gesture on and Above the Desktop. In *CHI '13 Extended Abstracts on Human Factors in Computing Systems*, CHI EA '13, pages 1233–1238, New York, NY, USA, 2013. ACM. Poster.
- [149] D. G. Rodrigues, E. Grenader, F. d. S. Nos, M. d. S. Dall'Agnol, T. E. Hansen, and N. Weibel. MotionDraw: A Tool for Enhancing Art and Performance Using Kinect. In *CHI '13 Extended Abstracts on Human Factors in Computing Systems*, CHI EA '13, pages 1197–1202, New York, NY, USA, 2013. ACM. Poster.
- [150] N. Weibel, S. Ashfaq, A. Calvitti, J. D. Hollan, and Z. Agha. Multimodal Data Analysis and Visualization to Study the Usage of Electronic Health Records. In *Proceedings of the 7th International Conference on Pervasive Computing Technologies for Healthcare*, PervasiveHealth '13, pages 282–283, ICST, Brussels, Belgium, Belgium, 2013. ICST (Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering). Poster.
- [151] A. M. Piper, N. Weibel, and J. D. Hollan. A Pen-based Toolkit for Authoring Collaborative Language Activities. In *Proceedings of the ACM 2012 Conference on Computer Supported*

Cooperative Work Companion, CSCW '12, pages 269–270, New York, NY, USA, 2012. ACM. Demo.

- [152] A. Fouse, N. Weibel, E. Hutchins, and J. D. Hollan. ChronoViz: A System for Supporting Navigation of Time-coded Data. In *CHI '11 Extended Abstracts on Human Factors in Computing Systems*, CHI EA '11, pages 299–304, New York, NY, USA, 2011. ACM. Demo.
- [153] J. Steimle, N. Weibel, S. Olberding, M. Mülh user, and J. D. Hollan. PLink: Paper-based Links for Cross-media Information Spaces. In *CHI '11 Extended Abstracts on Human Factors in Computing Systems*, CHI EA '11, pages 1969–1974, New York, NY, USA, 2011. ACM. Poster.
- [154] N. Weibel, L. G. Cowan, L. R. Pina, W. G. Griswold, and J. D. Hollan. Enabling Social Interactions Through Real-time Sketch-based Communication. In *Adjunct Proceedings of the 23Nd Annual ACM Symposium on User Interface Software and Technology*, UIST '10, pages 405–406, New York, NY, USA, 2010. ACM. Poster.
- [155] N. Weibel, A. M. Piper, and J. D. Hollan. Exploring Pen and Paper Interaction with High-resolution Wall Displays. In *Adjunct Proceedings of the 23Nd Annual ACM Symposium on User Interface Software and Technology*, UIST '10, pages 455–456, New York, NY, USA, 2010. ACM. Poster.
- [156] N. Weibel, A. M. Piper, and J. D. Hollan. HlPerPaper: Introducing Pen and Paper Interfaces for Ultra-scale Wall Displays. In *Adjunct Proceedings of the 23Nd Annual ACM Symposium on User Interface Software and Technology*, UIST '10, pages 407–408, New York, NY, USA, 2010. ACM. Poster.
- [157] N. Weibel, A. Ispas, B. Signer, and M. C. Norrie. Paperproof: A Paper-digital Proof-editing System. In *CHI '08 Extended Abstracts on Human Factors in Computing Systems*, CHI EA '08, pages 2349–2354, New York, NY, USA, 2008. ACM. Demo.
- [158] B. Signer, M. C. Norrie, M. Grossniklaus, R. Belotti, C. Decurtins, and N. Weibel. Paper-based Mobile Access to Databases. In *Proceedings of the 2006 ACM SIGMOD International Conference on Management of Data*, SIGMOD '06, pages 763–765, New York, NY, USA, 2006. ACM. Demo.

Workshop Papers

- [159] N. Rizvi, R. Casanova-Perez, H. Ramaswamy, L. Dirks, E. Bascom, and N. Weibel. QTBIPOC PD: Exploring the Intersections of Race, Gender, and Sexual Orientation in Participatory Design. In *CHI Conference on Human Factors in Computing Systems Extended Abstracts*, pages 1–4, 2022.
- [160] N. Rizvi, H. Ramaswamy, R. Casanova-Perez, A. Hartzler, and N. Weibel. Making Hidden Bias Visible: Designing a Feedback Ecosystem for Primary Care Providers. In *Proceedings of the 2022 CHI Conference Extended Abstracts on Human Factors in Computing Systems*, 2022. Workshop.
- [161] J. Johnson, K. Mrini, M. Hogarth, A. Moore, N. Nakashole, N. Weibel, and E. Farcas. Voice-based conversational agents for older adults. In *Proceedings of the 2020 CHI Conference Extended Abstracts on Human Factors in Computing Systems*, 2020. Workshop.
- [162] S. R. Rick, E. Beneteau, R. Casanova-Perez, C. Lane, C. Emmenegger, J. Sabin, W. Pratt, A. Hartzler, and N. Weibel. Cognitive bias in patient-provider communication: Sensing and design to reduce health disparities. In *Proceedings of the 2020 CHI Conference Extended Abstracts on Human Factors in Computing Systems*, 2020. Workshop.
- [163] T. Sharkey, J. G. Johnson, D. Gasques, and N. Weibel. I want to be a surgeon! role playing for remote surgery in mixed reality. In *WISH – Workshop on Interactive Systems for Healthcare*, CHI '19, Glasgow, UK, 2019. Workshop.

- [164] A. Vovk, D. Gasques, F. Wild, and N. Weibel. Special Interest Group on Spatiality of Augmented Reality User Interfaces. In *Proceedings of the 2019 CHI Conference Extended Abstracts on Human Factors in Computing Systems*, CHI EA'19, New York, NY, USA, 2019. ACM. Workshop.
- [165] L. Mueller, M. Budde, N. Weibel, E. A. Spencer, M. Beigl, and D. Norman. Learning from Failure: Designing for Complex Sociotechnical Systems. In *Proceedings of the 2017 ACM International Joint Conference on Pervasive and Ubiquitous Computing and Proceedings of the 2017 ACM International Symposium on Wearable Computers*, UbiComp '17, pages 988–991, New York, NY, USA, 2017. ACM. Workshop.
- [166] S. Rick, V. Ramesh, D. Gasques Rodrigues, and N. Weibel. Pervasive Sensing in Healthcare: From Observing and Collecting to Seeing and Understanding. In *Proceedings of WISH 2017, Workshop on Interactive System for Healthcare, CHI 2017*, 2017. Workshop Paper.
- [167] N. Weibel. New Frontiers for Pervasive Telemedicine: From Data Science in the Wild to Holo-Presence. In *Proceedings of the 11th EAI International Conference on Pervasive Computing Technologies for Healthcare*, PervasiveHealth '17, pages 276–281, New York, NY, USA, 2017. ACM. Workshop Paper.
- [168] X. Ochoa, M. Worsley, N. Weibel, and S. Oviatt. Multimodal Learning Analytics Data Challenges. In *Proceedings of the Sixth International Conference on Learning Analytics & Knowledge*, LAK '16, pages 498–499, New York, NY, USA, 2016. ACM. Workshop.
- [169] L.-P. Morency, S. Oviatt, S. Scherer, N. Weibel, and M. Worsley. ICMI 2013 Grand Challenge Workshop on Multimodal Learning Analytics. In *Proceedings of the 15th ACM on International Conference on Multimodal Interaction*, ICMI '13, pages 373–378, New York, NY, USA, 2013. ACM. Workshop.
- [170] S. Oviatt, A. Cohen, and N. Weibel. Multimodal Learning Analytics: Description of Math Data Corpus for ICMI Grand Challenge Workshop. In *Proceedings of the 15th ACM on International Conference on Multimodal Interaction*, ICMI '13, pages 563–568, New York, NY, USA, 2013. ACM. Workshop.
- [171] S. Scherer, N. Weibel, L.-P. Morency, and S. Oviatt. Multimodal Prediction of Expertise and Leadership in Learning Groups. In *Proceedings of the 1st International Workshop on Multimodal Learning Analytics*, MLA '12, pages 1:1–1:8, New York, NY, USA, 2012. ACM. Workshop Paper.
- [172] M. Liwicki, K. Schumacher, A. Dengel, N. Weibel, B. Signer, and M. C. Norrie. Pen and Paper-based Interaction with the Semantic Desktop. In *Proc. DAS 2008, Workshop on Document Analysis Systems*, Nara, Japan, September 2008. Workshop Paper.
- [173] M. Liwicki, K. Schumacher, A. Dengel, N. Weibel, B. Signer, and M. C. Norrie. Semantic elnk - Pen and Paper-based Interaction with the Semantic Desktop. In *Proc. DAS 2008, Workshop on Document Analysis Systems*, Nara, Japan, September 2008. Workshop Paper.
- [174] M. C. Norrie, B. Signer, and N. Weibel. General framework for the rapid development of interactive paper applications. In *Proc. CoPADD*, volume 6, pages 9–12, 2006. Workshop Paper.

*Primary publication's mean for computing research are conference proceedings. Many conferences organized by ACM, the Association for Computer Machinery (e.g. CHI, Ubicomp, UIST, CSCW, IUI, ETRA) are considered top publication venues for human-computer interaction.

(see http://scholar.google.com/citations?view_op=top_venues&vq=eng_humancomputerinteraction).

¹Authors listed in alphabetical order.

Press/News Coverage

- Nov 01, 2021 **Making Voice Assistants Accessible for Older Patients,**
UC San Diego News, <https://ucsdnews.ucsd.edu/pressrelease/making-voice-assistants-accessible-for-older-patients>.
- June 10, 2021 **'It Feels like I'm Talking into a Void': How Do We Improve the Virtual Classroom?,**
UC San Diego News, <https://today.ucsd.edu/story/it-feels-like-im-talking-into-a-void-how-do-we-improve-the-virtual-classroom>.
- June 02, 2020 **A Cross-Border Approach to Tackling COVID-19 ,**
UC San Diego News, <https://ucsdnews.ucsd.edu/pressrelease/a-cross-border-approach-to-tackling-covid-19>.
- May 11, 2020 **UC San Diego Team Delivers Protective Equipment to Hospitals in Baja California,**
UC San Diego, Computer Science Department News, <https://cse.ucsd.edu/about/news/uc-san-diego-team-delivers-protective-equipment-hospitals-baja-california>.
- April 20, 2020 **UC San Diego's Earth 2.0 COVID-19 Response Platform Connects Clinicians with Resources, Engineers and Answers,**
UC San Diego, Jacobs School of Engineering News, https://jacobsschool.ucsd.edu/news/news_releases/release.sfe?id=3017.
- October 25, 2019 **Researchers Receive \$2.8 Million Grant to Study Hidden Biases in Healthcare ,**
UC San Diego News, <https://ucsdnews.ucsd.edu/pressrelease/researchers-receive-2.8-million-grant-to-study-hidden-biases-in-healthcare>.
- October 23, 2019 **Can tech make doctors aware of their unconscious biases?,**
UW Medicine News, <https://newsroom.uw.edu/postscript/can-tech-make-doctors-aware-their-unconscious-biases>.
- May 30, 2019 **Healthcare Meets Human-Centered Computing ,**
UC San Diego, Computer Science Department News, <https://cse.ucsd.edu/about/news/healthcare-meets-human-centered-computing>.
- May 30, 2017 **UC San Diego opens first virtual reality lab for undergrads,**
UC San Diego News, <https://www.universityofcalifornia.edu/news/uc-san-diego-opens-first-virtual-reality-lab-undergrads> .
- Apr 28, 2016 **The Joys of Science: Torrey Pines Elementary holds Science Discovery Day in La Jolla,**
La Jolla Light, <https://www.lajollalight.com/news/local-news/sdljl-tpes-science-day-2016-2016apr27-story.html> .
- Sept 6, 2015 **Baby monitor keeps watch on infant's vital signs for parents,**
San Francisco Chronicle, <http://www.sfchronicle.com/health/article/Baby-monitor-keeps-watch-on-infant-s-vital-6488470.php> .
- Aug 11, 2015 **UC San Diego Startup Invited to First-Ever White House Demo Day,**
UCSD Jacobs' School of Engineering Press Release, http://www.jacobsschool.ucsd.edu/news/news_releases/release.sfe?id=1791.

- Aug 10, 2015 **Computer Scientists Develop Technology To Help Locked In Syndrome Patients Communicate Using Eye Tracking,**
Tech Times, <http://www.techtimes.com/articles/75323/20150810/computer-scientists-develop-technology-to-help-locked-in-syndrome-patients-communicate-using-eye-tracking.htm>.
- Aug 03, 2015 **Computer Scientists Work to Help Individuals with Locked-in Syndrome Thanks to Moxie Foundation,**
UC San Diego News Center & Medical Design Technology Magazine, http://ucsdnews.ucsd.edu/pressrelease/computer_scientists_work_to_help_individuals_with_locked_in_syndrome_thanks <http://www.mdtmag.com/news/2015/08/computer-scientists-work-help-individuals-locked-syndrome-f>.
- Feb 9, 2015 **Engineers work to unlock Naugatuck man's brain,**
Republican American, <http://www.rep-am.com/articles/2015/02/09/news/local/860830.txt>,
<http://www.mycitizensnews.com/news/2015/02/engineers-work-to-unlock-syndrome/>.
- Feb 05, 2015 **Doc-watcher spots when physicians stop listening,**
NewScientist - Tech, <http://www.newscientist.com/article/mg22530073.000>.
- Dec 27, 2014 **Hope of finding a key to locked-in syndrome: California team to visit local patient,**
Republican American, <http://www.rep-am.com/articles/2014/12/27/news/local/851937.txt>.
- Dec 19, 2014 **Combined Grad, Undergrad Courses Yield Solutions for Locked-In Syndrome,**
UCSD CSE Newsletter, <http://cse.ucsd.edu/node/2688>.
- July 31, 2014 **The Power of the Doodle: Improve Your Focus and Memory,**
Wall Street Journal,
<http://online.wsj.com/articles/the-power-of-the-doodle-improve-your-focus-and-memory-1406675744>.
- July 31, 2014 **Computer Science and the Art of the Doodle,**
UCSD CSE Newsletter, <http://cse.ucsd.edu/node/2585>.
- July 31, 2014 **No More Paper Trail,**
Drexel University Research Magazine,
<http://exelmagazine.org/article/no-more-paper-trail/>.
- June 26, 2014 **Study finds Facebook for weight loss promising for college student,**
MobileHeath News,
<http://mobihealthnews.com/34461/study-finds-facebook-for-weight-loss-promising-for-college-students>.
- June 10, 2014 **Wearable Augmented-Reality Solution for Color Blindness,**
UCSD CSE Newsletter, <http://cse.ucsd.edu/node/2557>.
- Dec. 2, 2013 **Adventures in Ubiquitous Computing,**
UCSD CSE Newsletter, <http://cse.ucsd.edu/node/2365>.
- June 14, 2012 **PervasiveHealth Conference Explores Ubiquitous Computing in Health Care and Well-being,**
Calit2 Web articles, <http://www.calit2.net/newsroom/article.php?id=2012>,
UCSD Web news, http://ucsdnews.ucsd.edu/pressreleases/pervasivehealth_conference_explore_ubiquitous_computing_in_health_care_and/.

- Sept. 2 2011 **Doodle on your Facebook and Twitter in real-time with UbiSketch**, *CBS News, Tech News*, http://www.cbsnews.com/8301-501465_162-20101003-501465.html.
- Sept. 1 2011 **Tweet your doodles with UbiSketch**, *NewScientist, One Percent*, <http://www.newscientist.com/blogs/onepercent/2011/09/tweet-your-doodles-with-ubiske.html>.
- Sept. 1 2011 **Doodle While You're bored? Now You Can Tweet Your Notebook Art With UbiSketch**, *MediaBistro.com, AllTwitter*, http://www.mediabistro.com/alltwitter/doodle-while-youre-bored-now-you-can-tweet-your-notebook-art-with-ubisketch_b13357#more-13357.

Patents

- June 6, 2024 **Pose-based identification of weakness**, *V. Ramesh, N. Weibel, G. Cauwenberghs, K. Agrawal, B.C. Meyer*, US Patent App. 18/547,478, 2024.
- November 9, 2023 **Collaborative mixed-reality system for immersive surgical telementoring**, *N. Weibel, M. Yip, D.G. Rodrigues, T. Sharkey, J. Johnson, K. Davis*, US Patent App. 17/980,438, 2023.
- February 10, 2022 **Systems and methods for moldable and castable personal protective face masks**, *T. Sharkey, N. Weibel*, US Patent App. 17/394,229, 2022.
- February 5, 2021 **Diagnosing and Tracking Stroke with Sensor-based Assessment**, *V. Ramesh, N. Weibel, G. Cauwenberghs, K. Agrawal, B.C. Meyer*, US Provisional Patent 63/146,450, Full Patent filed Feb. 5, 2022.
- February 25, 2021 **Identifying Weakness in Sitting Stroke Patients by Capturing Neurologist Acumen with Machine Learning**, *V. Ramesh, N. Weibel, G. Cauwenberghs, K. Agrawal, B.C. Meyer*, US Provisional Patent 63/153,902, Full Patent filed Feb. 25, 2022.
- June 18, 2020 **Enhanced ultrasound systems and methods**, *P. Suresh, D. Gasques, N. Weibel, Anderson E.*, US Patent App. 16/643,505, 2020.

Research Grants

Independent Research Funding

- January 2025 **Lytx Inc., Optimizing Lytx's Coaching Model: Enhancing Safety and ROI Through Intelligent Coaching Systems**, \$160,000.
Principal Investigator
- December 2024 **California HIV Research Program, ConversHIVE: Decreasing Implicit Bias in HIV Prevention and Care Teams through AI-based Coaching**, \$100,000.
Principal Investigator

- December 2024 **UCSD Office of Innovation and Commercialization**, *HoloStroke-CTA: Revolutionizing Stroke Care with 3D Vascular Visualization in XR*, Accelerating Innovations to Market, \$50,000.
Principal Investigator
- December 2024 **UCSD Senate**, *Towards Mobile Contextual Sensing for Just-in-Time DBT Interventions for Social Anxiety*, \$15,000.
Principal Investigator
- September 2024 **UCSD Institute Of Engineering In Medicine**, *Intelligent Tutoring System to Support In-Session Contouring in Radiation Oncology*, Galvanizing Engineering in Medicine (GEM), \$15,000.
Principal Investigator
- June 2022, 2023, 2024 **Adobe Inc.**, *Gift Grant to support research on Human-centered eXtended Intelligence*, \$60,000.
Principal Investigator
- July 2022 **University of California, Office of the President**, *Designing Just Futures: An Interdisciplinary Cluster Hire Advancing Design, Social Justice, and Indigenous, Black and Migrant Futures*, \$499,920.
Principal Investigator
- June 2022 **Google Inc.**, *Gift Grant to support QT-BIPOC Research*, \$2,500.
Principal Investigator
- April 2022 – March 2027 **NIH P01 AI169609**, *Leaving, Coming, and Staying HIV Obligate Microenvironments (HOME)*, \$8,062,020.
Co-Investigator, Core Director (Admin and Data Core – \$1,600,000), (Smith PI)
- Sept 2021 – Aug 2024 **NSF 2124975**, *Ethical and Responsible Research in the Design of Sociotechnical Systems*, \$400,000.
Co-Investigator, (Nebeker PI)
- Jan 2021 – Dec 2025 **HRSA 20-078**, *Community Informed Molecular Epidemiology for Treatment and Care*, \$2,500,000.
Co-Investigator, (Little PI)
- Sept 2020 – Sept 2022 **Univ. of Paraiba (Brazil)**, *MedTech Horizon - Rethinking the Technological Horizons of Medical Device Technologies*, \$190,000.
Principal Investigator
- July 2020 – Sept 2022 **Intuitive Surgical**, *Fundamental Concepts for Effective eXtended Reality in the Operating Room*, \$165,000.
Principal Investigator
- Sept 2019 – Dec 2022 **NSF IIP 2037916**, *NSF I-CORPS Team: UbiStroke, AI-Based Clinical Decision Support for Acute Stroke*, \$50,000.
Principal Investigator
- Sept 2020 – August 2021 **Office of Naval Research / SOLUTE Inc.**, *ARTEMIS++: Beyond Augmented Reality Technology to Enable Remote Surgery*, \$300,000.
Principal Investigator

- Sept 2019 – May 2023 **NIH/NLM, UnBIASED: Understanding Biased patient-provider Interaction And Supporting Enhanced Discourse**, \$3,126,000.
Principal Investigator (UCSD)
- Oct 2019 – June 2021 **NIH/NIA, VOLI: Voice Assistant For Quality Of Life And Healthcare Improvement In Aging Populations**, \$600,000.
Co-Investigator, (Farcas PI)
- July 2019 – June 2024 **NIH/NIAID, iContour: Interactive contouring simulation to improve outcomes of cancer patients treated with radiation therapy**, \$1,985,000.
Co-Investigator, (Murphy, Gillespie, PIs)
- June 2018 – May 2019 **IBM, Project BlueSky: Monitoring Parkinson's Disease With Sensors and Analytics**, \$150,000.
Principal Investigator
- July 2018 – June 2020 **Office of Naval Research, Augmented Reality Technology Enabled reMote Integrated Surgery**, \$350,000.
Principal Investigator
- Aug 2017 – July 2022 **NIH/NIAID, PIRC: Primary Infection Research Consortium**, \$16,500,000.
Co-Investigator, Director of Technology, (Little PI)
- June 2018 – May 2023 **NIH/NHLBI, Smart 2.0: Social Mobile Approaches to Reduce weight**, \$3,700,000.
Co-Investigator, (Godino PI)
- April 2018 – May 2021 **California HIV Research Program, Californians Talk HIV Using Social Media to Get Steps Ahead**, \$1,800,000.
Co-Principal Investigator, (Ayers PI)
- Aug 2017 – July 2022 **NIH/NIAID, R3: Revealing Reservoir During Rebound**, \$7,750,000.
Program-Director (Data and Visualization Core), (Smith PI)
- Sept 2016 – Aug 2019 **NSF, SL-CN: Learning to Move and Moving to Learn**, \$750,000.
Co-Investigator, (Chucoskie PI)
- Janu 2017 – Sept 2018 **UCSD – Frontiers of Innovation Scholars Program (FISP), Stroke-Kinect: A Sensor-Based Approach Towards Creating a Multimodal Stroke Signature**, \$50,000.
Principal Investigator
- Jan 2017 – Dec 2017 **UCSD Chancellor's Interdisciplinary Collaboratories, Designing CORE: a Connected and Open Research Ethics framework**, \$62,500.
Principal Investigator (Nebeker, Bloss Co-PIs)
- April 2016 – March 2018 **NIH - NICHD, In-store and parent-child influences on food shopping**, \$428,787.
UCSD Principal Investigator (Castro, Ayala, SDSU Co-PIs)
- April 2016 – Oct 2017 **NIH – NIDA, TMARC Developmental, Characterizing the Relationship of Methamphetamine Use and Neurocognitive Impairment in HIV at-risk Online Networks**, \$27,000.
Principal Investigator
- Jan 2016 – Dec 2016 **UCSD Chancellor's Interdisciplinary Collaboratories, Designing CORE: a Connected and Open Research Ethics framework**, \$62,500.
Principal Investigator (Nebeker, Bloss Co-PIs)

Nov 2015 – Oct 2017	Robert Wood Johnson Foundation , <i>Designing, building, and testing a Web-based prototype to foster the ethical design and review of health research</i> , \$350,000. Co-Investigator; Lead Technology Development and Design (Nebeker PI)
July 2015	Moxie Foundation , <i>Assistive Technology and Ubiquitous Computing Research</i> , \$300,000. Principal Investigator
June 2015 – Nov 2016	US NSF 1542255 , <i>I-Corps Teams: Cocoon Cam, a Wearless Smart Baby Monitor</i> , \$50,000. Principal Investigator
April 2015 – March 2020	NIH - NCI , <i>Effect of Packaging on Smoking Perception and Behavior: a Randomized Control Trial</i> , \$2,500,000. Co-Investigator (Strong PI)
April 2015	Lawrence Bock , <i>Adaptive Context-Aware Assistive Technology for People with Low-Vision</i> , \$60,000. Principal Investigator
Jan 2015 – Sept 2016	UCSD – Frontiers of Innovation Scholars Program (FISP) , <i>Detecting HIV at-risk MSM in San Diego through Social Networks</i> , \$25,000. Principal Investigator
Jan 2015	ION Bank Foundation , <i>Travel Grant for field research on Locked-in Syndrome</i> , \$10,000. Principal Investigator
Jan 2015 – March 2017	NIH – NIAID CFAR Developmental , <i>PIRC-NET: Analyzing Social Media to characterize HIV at-risk populations among MSM in San Diego</i> , \$50,000. Principal Investigator
Sept 2014 – Jan 2015	Moxie Foundation , <i>Support for educational and research efforts around Locked-in Syndrome</i> , \$42,500. Principal Investigator
Jan 2015 – Sept 2018	VA Merit , <i>Design and Evaluation of User Centered Electronic Health Records (DEUCE)</i> , \$1,100,000. Co-Investigator (Ohno-Machado PI)
Aug 2014 – July 2016	NIH – NIMH R25 , <i>Interdisciplinary Research Fellowship in NeuroAIDS (IRFN)</i> . Fellow
Oct 2012 – Sept 2017	NIH – NIDA Avant-Garde , <i>Molecular epidemiology for HIV prevention for drug users and other risk groups</i> , \$2,500,000. Co-Investigator (Smith PI)
Oct 2012 – Sept 2017	AHRQ – R01 , <i>Quantifying Electronic Medical Record Usability to Improve Clinical Workflow (QUICK)</i> , \$2,500,000. Co-Investigator (Agha PI)
Sept 2012 – Aug 2014	NIH – NLM R21 , <i>Introducing Digital Pen and Wall Displays for Improving Resuscitation Team Performance</i> , \$275,000. Co-Investigator (Burd, PI)
Aug 2012 – Dec 2012	Swiss NSF PA00P2_142066 , <i>Towards a Multimodal Paper-Digital Infrastructure for Content Sharing and Collaboration for Health Care, Education and Social Interaction</i> , \$35,000. Principal Investigator

Sept 2011 – Aug 2012 **Swiss NSF PA00P2_136434**, *A Multimodal Paper-Digital Infrastructure For Health Care Applications*, \$50,600.
Principal Investigator

PhD and Postdoctoral Funding

January 2011 – December 2012 **UCSD – Boeing Project Agreement 2011-012 / Boeing Project Agreement 2012**, *Flight Crew Performance Data Collection and Analysis Tool*.
Postdoctoral Researcher (Hutchins PI)

October 2009 – August 2011 **US NSF IIS-0729013**, *A Multiscale Framework for Analyzing Activity Dynamics*.
Postdoctoral Researcher (Hollan and Hutchins Co-PIs)

September 2007 – August 2008 **Swiss NSF 200020-117808**, *General Model for Tracking User Actions on Documents*.
Ph.D. student (Norrie PI)

September 2004 – August 2007 **Swiss NSF 200021-103432**, *Inforama: Promoting Community Awareness through Ambient Information*.
Ph.D. student (Norrie PI)

April 2005 – March 2008 **European Research Commission, EU STREP FP6-516895**, *PaperWorks: Interweaving Paper and Digital Documents*, Partners: King's College London, Acreo AB, Arjowiggins SAS, ETH Zurich, Malmö University, Brunel University, Anoto AB, Pearson Education.
Ph.D. student (Norrie PI)

Honors and Awards

May 2024 **CHI 2024, ACM International Conference on Human Factors in Computing Systems**, *Honourable Mention Award*.

September 2023 **UCOP Advancing Faculty Diversity initiative on Designing Just Futures, UC San Diego**, *UCSD Inclusive Excellence Award*.

August 2021 **UCSD CSE Department**, *Postdoctoral CSE Award for E. Barbut*.

May 2018 **CHI 2018, ACM International Conference on Human Factors in Computing Systems**, *Honourable Mention Award*.

August 2017 **NIH/NIMH**, *Interdisciplinary Research Award in NeuroAIDS*.

June 2016 **UCSD CSE Department**, *Masters Admission Committee Exemplary Service Award*.

May 2016 **Pervasive Health 2016, International Conference on Pervasive Computing Technologies for Healthcare**, *Best Paper Award*.

May 2016 **European Alliance for Innovation (EAI)**, *Certificate of Appreciation for Outstanding and Lasting Contribution to Pervasive Health*.

June 2015 **National Science Foundation (NSF)**, *Innovation Corps Program Certification*.

April 2015 **UCSD Jacobs School of Engineering**, *Research Expo 2015*,
Best Computer Science and Engineering Poster.

September 2014 **UbiComp 2014, ACM International Joint Conference on Pervasive and Ubiquitous Computing**,
Best Paper Nominee Award.

- July 2014 **HFES, Human Factors and Ergonomics Society,**
2014 Best JCEDM Article Award.
- July 2014 **NIH, National Institute of Mental Health (NIMH),**
Interdisciplinary Research Fellowship in NeuroAIDS.
- February 2013 **University of California San Diego.**
Professional Development Award
- June 2012 **Swiss National Science Foundation (SNF).**
Fellowship for advanced researchers
- June 2011 **Swiss National Science Foundation (SNF).**
Fellowship for advanced researchers
- October 2010 **ASSETS 2010, ACM SIGACCESS Conference on Computers and Accessibility.**
Best Student Paper Award (Anne Marie Piper)

Professional Activities

Steering Committees, Advisory and Editorial Boards

- 2024 – **ACM IMWUT**, *Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies.*
Editor
- 2021 – **UbiComp**, *ACM International Conference on Pervasive and Ubiquitous Computing*,
<https://ubicomp.org/sc>.
Steering Committee Member
- 2016 – 2024 **ACM IMWUT**, *Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies.*
Associate Editor
- 2016 – 2020 **PHaT**, *EAI Transactions on Pervasive Health and Technology.*
Associate Editor
- 2013 **Pervasive Health: State-of-the-Art and Beyond**, *Human-Computer Interaction Series*,
Springer, 2013.
Advisory Board Member

Conferences Organization

- 2023 **UbiComp 2023**, *ACM Int. Joint Conference on Pervasive and Ubiquitous Computing.*
General Co-Chair
- 2020 **UbiComp 2020**, *ACM Int. Joint Conference on Pervasive and Ubiquitous Computing.*
General Co-Chair
- 2019 **WISH at CHI 2019**, *Symposium of the Workgroup on Interactive Systems in Health (WISH), SIGCHI conference on human factors in computing systems (CHI).*
Co-Chair
- 2018 **Pervasive Health 2018**, *Int. Conf. on Pervasive Computing Technologies for Healthcare.*
Program Co-Chair
- 2016 **UbiComp 2016**, *ACM Int. Joint Conference on Pervasive and Ubiquitous Computing.*
Doctoral Colloquium Co-Chair

Nadir Weibel – University of California San Diego – La Jolla CA, 92093-0404, USA

☎ +1 (858) 534-8637 • ✉ weibel@ucsd.edu • 📧 weibel@ucsd.edu

- 2016 **Pervasive Health 2016**, *Int. Conf. on Pervasive Computing Technologies for Healthcare*.
General Co-Chair
- 2016 **MLA 2016**, *Fifth Multimodal Learning Analytics Data Challenges*.
Workshop Organizing committee
- 2014 **CHI 2014**, *SIGCHI conference on human factors in computing systems*.
Workshops Chair
- 2013 **SenseCam and Pervasive Images 2013**, *International Symposium on Ethics, Analysis, and Applications of Life Logging Images to Health and Related Behaviors*.
Program Chair
- 2013 **ICMI 2013**, *Grand Challenge Workshop on Multimodal Learning Analytics*.
Workshop Organizing committee
- 2013 **PervasiveHealth 2013**, *International ICST Conference on Pervasive Computing Technologies for Healthcare*.
Publicity Chair
- 2013 **CHI 2013**, *SIGCHI conference on human factors in computing systems*.
Workshops Chair
- 2012 **PervasiveHealth 2012**, *International ICST Conference on Pervasive Computing Technologies for Healthcare*.
Local Chair
- 2012 **IUI 2012**, *International Conference on Intelligent User Interfaces*.
Demo Chair
- 2007 **CoPADD 2007**, *Internat. Workshop on Collaborating over Paper and Digital Documents*.
Administrative Assistant
- 2006 **CoPADD 2006**, *Internat. Workshop on Collaborating over Paper and Digital Documents*.
Administrative Assistant

Program Committees

- 2025 **CHI 2025** – SIGCHI conference on human factors in computing systems – Yokohama (Japan), April 2025 – Associated Chair, *Health Subcommittee*
- 2022 **CHI 2022** – SIGCHI conference on human factors in computing systems – New Orleans (USA), May 2022 – Associated Chair, *Health Subcommittee*
- 2021 **CHI 2021** – SIGCHI conference on human factors in computing systems – Virtual – Associated Chair, *Health Subcommittee*
- 2019 **PervasiveHealth 2019** – International ICST Conference on Pervasive Computing Technologies for Healthcare – Trento (Italy), May 2019
- 2018 **PervasiveHealth 2018** – International ICST Conference on Pervasive Computing Technologies for Healthcare – New York (USA), May 2018
- 2016 **MMHealth 2016** – International Workshop on Multimedia for personal health and health care – Amsterdam (The Netherlands), October 2016
- 2016 **ICT4AWE 2016** – International Conference on Information and Communication Technologies for Ageing Well and e-Health – Rome (Italy), April 2016

Nadir Weibel – University of California San Diego – La Jolla CA, 92093-0404, USA

☎ +1 (858) 534-8637 • ✉ weibel@ucsd.edu • 📧 weibel.ucsd.edu

25/38

- 2015 **Ubicomp 2015** – ACM International Joint Conference on Pervasive and Ubiquitous Computing – Osaka (Japan), September 2015, *Papers and Notes*
- 2015 **CHI 2015** – SIGCHI conference on human factors in computing systems – Seoul (South Korea), April 2015, *Workshops Jury*
- 2014 **MobiWIS 2014** – International Conference on Mobile Web Information Systems– Barcelona (Spain), August 2014
- 2014 **CHI 2014** – SIGCHI conference on human factors in computing systems – Toronto (Canada), April 2014 – Associated Chair, *Specific Application Areas - Health*
- 2014 **PhyCS 2014** – International conference on Physiological Computing Systems – Lisbon (Portugal), January 2014
- 2013 **SenseCam 2013** – International Symposium on Ethics, Analysis, and Applications of Life Logging Images to Health and Related Behaviors – San Diego (USA), November 2013
- 2013 **PervasiveHealth 2013** – International ICST Conference on Pervasive Computing Technologies for Healthcare – Venice (Italy), May 2013
- 2013 **CHI 2013** – SIGCHI conference on human factors in computing systems – Paris (France), May 2013 – Associated Chair, *Expanding Interaction through Technologies*
- 2012 **UCAmI 2012** – International Symposium on Ubiquitous Computing and Ambient Intelligence – Vitoria-Gasteiz (Spain), December 2012
- 2012 **IWAAL 2012** – International Workshop on Ambient Assisted Living – Vitoria-Gasteiz (Spain), December 2012
- 2012 **IE 2012** – International Conference on Intelligent Environments – Guanajuato (Mexico), June 2012
- 2012 **IUI 2012** – International Conference on Intelligent User Interfaces – Lisbon (Portugal), February 2012
- 2011 **UCAmI 2011** – International Symposium on Ubiquitous Computing and Ambient Intelligence – Riviera Maya (Mexico), December 2011

Workshops Organization

- 2022 **QTBPOC PD: Exploring the Intersections of Race, Gender, and Sexual Orientation in Participatory Design** – Workshop at CHI 2022, SIGCHI conference on human factors in computing systems – New Orleans (USA), May 2022
- 2019 **SIG: Spatiality of Augmented Reality User Interfaces** – Special Interest Group at CHI 2019, SIGCHI conference on human factors in computing systems – Glasgow (Scotland), May 2019
- 2017 **Learning from Failure: Designing for Complex Sociotechnical Systems** – Workshop at Ubicomp 2017, ACM Int. Joint Conference on Pervasive and Ubiquitous Computing – Maui (HI), September 2017
- 2016 **Designing the CORE: a platform for Connected and Open Research Ethics** – Workshop at PervasiveHealth 2016, International ICST Conference on Pervasive Computing Technologies for Healthcare – Cancun (Mexico), May 2016

- 2016 **Using a Design-Thinking to Inform the Connected and Open Research Ethics (CORE) Project: A Participatory Approach** – Seminar at the Society for Behavioral Medicine Meeting 2016 – Washington D.C. (USA), March 2016
- 2014 **User-Centered Design of Pervasive Healthcare Applications** – Workshop at PervasiveHealth 2014, International ICST Conference on Pervasive Computing Technologies for Healthcare – Oldenburg (Germany), May 2014

Session Chair

- 2022 **CHI 2022** SIGCHI conference on human factors in computing systems – New Orleans (USA), May 2022 – *UX of XR*
- 2021 **CHI 2021** SIGCHI conference on human factors in computing systems – Virtual, May 2021 – *Clinical Support – C*
- 2019 **PervasiveHealth 2019** International Conference on Pervasive Computing Technologies for Healthcare – Trento (Italy), May 2019 – *Children and Youth*
- 2018 **CHI 2018** SIGCHI conference on human factors in computing systems – Montreal (Canada), May 2018 – *Meditation and Movement*
- 2017 **Ubicomp 2017** ACM Int. Joint Conference on Pervasive and Ubiquitous Computing – Maui (HI), September 2017 – *Health 1*
- 2016 **Ubicomp 2016** ACM Int. Joint Conference on Pervasive and Ubiquitous Computing – Heidelberg (Germany), September 2017 – *Supporting the visually and motor impaired*
- 2014 **CHI 2014** SIGCHI conference on human factors in computing systems – Toronto (Canada), April/May 2014 – *On and Above the Surface*
- 2013 **SenseCam 2013** International conference on SenseCam and Pervasive Imaging– San Diego (USA), November 2013 – *SenseCam Experiences*
- 2013 **CHI 2013** SIGCHI conference on human factors in computing systems – Paris (France), May 2013 – *Design for the Home*
- 2013 **PervasiveHealth 2013** International ICST Conference on Pervasive Computing Technologies for Healthcare – Venice (Italy), May 2013 – *Monitoring Sleep and Affect*

Panels

- 2021 **UCSD Design Lab** – Cultivating Culture Initiative – UCSD, La Jolla, CA (USA), September 2021 – Panel on Self Management
- 2014 **ISGS 2014** – 4th International Society of Gestures Studies 6 – UCSD, La Jolla, CA (USA), July 2014 – Gesture and Action Recognition, Panel on Sensing Technologies
- 2013 **SenseCam 2013** – 4th International Conference on SenseCam and Pervasive Imaging– UCSD, La Jolla, CA (USA), November 2013 – Frameworks to Guide Image Annotations
- 2012 **CSSA 2012** – 7th Annual Cognitive Science Conference – UCSD, La Jolla, CA (USA), April 2012 – Journey into Cognitive Science
- 2011 **WUC 2011** – 3rd Workshop Uniting the Californias – UCSD, La Jolla, CA (USA), November 2011 – Doctoral Consortium

Reviewing

Projects

- 2013, 2018, 2020 **NSF**, *US National Science Foundation, Directorate for Computer and Information Science and Engineering (CISE), Division of Information and Intelligent Systems (IIS).*
- 2019, 2020 **NSF**, *US National Science Foundation, Graduate Student Research Fellowship Program (GRFP).*
- 2017 **Royal Society of New Zealand**, *Marsden Fund .*
- 2016 **UCSD**, *Center for AIDS Research.*
- 2015 **UCSD**, *FISP Graduate Program.*
- 2012 **SER**, *Swiss State Secretariat for Education and Research Program.*

Journals

- 2017 – 2022 **IMWUT**, *Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies.*
- 2017 – 2018 **JCSCW**, *Journal of Computer Supported Cooperative Work.*
- 2012 – 2018 **IJHCS**, *International Journal of Human-Computer Studies.*
- 2015 – 2015 **ACM TACCESS**, *Transactions on Accessible Computing.*
- 2015 – 2018 **Oxford Journals, IWC**, *Interacting With Computers.*
- 2014 – 2015 **IEEE Pervasive Computing.**
- 2014 – 2014 **ACM TIIS**, *Transactions on Interactive Intelligent Systems.*
- 2014 – 2014 **ACM TOCHI**, *Transactions on Computer-Human Interaction.*
- 2014 – 2014 **PUC**, *Springer Personal and Ubiquitous Computing.*

Conferences

- 2008 – 2022 **CHI**, *SIGCHI conference on Human factors in computing systems.*
- 2008 – 2021 **UIST**, *ACM symposium on User Interface Software and Technology.*
- 2012 – 2019 **PervasiveHealth**, *International Conference on Pervasive Technology for Health.*
- 2010 – 2018 **CSCW**, *ACM conference on Computer Supported Cooperative Work.*
- 2013 – 2018 **TEI**, *International conference on Tangible and Embodied Interaction.*
- 2016 – 2017 **AMIA**, *American Medical Informatics Association Annual Symposium.*
- 2016 – 2016 **HICCS**, *International Conference on System Science.*
- 2014 – 2016 **Ubicomp**, *ACM International Joint Conference on Pervasive and Ubiquitous Computing.*
- 2010 – 2015 **ITS**, *ACM conference on Interactive Tabletops and Surfaces.*
- 2011 – 2013 **IUI**, *ACM International conference on Intelligent User Interfaces.*
- 2011 – 2013 **MobileHCI**, *ACM conference on Human-Computer Interaction with Mobile Devices.*
- 2012 – 2012 **IE**, *International conference on Intelligent Environments.*
- 2010 – 2011 **EICS**, *SIGCHI symposium on Engineering Interactive Computing Systems.*
- 2010 – 2011 **DIS**, *ACM conference on Designing Interactive Systems.*

Professional Memberships

- Since 2004 ACM, Association for Computing Machinery (Member No. 3506717)
- Since 2006 ACM Special Interest Group on Human-Computer Interaction (SIGCHI)
- Since 2006 ACM Special Interest Group on Hypertext, Hypermedia and the Web (SIGWEB)
- Since 2004 IEEE, Institute of Electrical and Electronics Engineers (Member No. 80429397)
- Since 2004 IEEE Computer Society
- Since 2004 SI, Swiss Informatics Society (Member No. SI-6385)
- Since 2008 SI Special Interest Group on Software Ergonomics
- Since 2007 SI Special Interest Group on Information Systems (DBTA)

University and Faculty Service

- 2024 – **UC San Diego, Academic Senate, Committee on Extended Studies.**
- 2023 – **UC San Diego, Dept. of Computer Science and Engineering, XR Lab Director.**
- 2022 – **UC San Diego, Design Lab, Associate Faculty Director.**
- 2019 – **UC San Diego, Dept. of Computer Science and Engineering, MS Affairs Committee.**
- 2022 – **UC San Diego – Designing Just Futures Cluster Hire, Faculty Search Committee Chair.**
- 2021 – 2022 **UC San Diego, Design Lab, Faculty Search Committee Chair.**
- 2014 – 2020 **UC San Diego, Dept. of Computer Science and Engineering, Women and Information Technology (WIT) Committee.**
- 2014 – 2019 **UC San Diego, Dept. of Computer Science and Engineering, MS Admission Committee.**
- 2015 – 2018 **UC San Diego, Office of Research Affairs, Frontiers of Innovation Scholar Program, Graduate Review Committee.**
- 2013 – 2015 **UC San Diego, Dept. of Computer Science and Engineering, MS Affair Committee.**
- 2014 **UC San Diego, Early Childhood Education Center Hiring Committee.**

Community Service

- 2024 **La Jolla High School, La Jolla, CA, Science and Technology Presenter.**
- 2014 – 2022 **Torrey Pines Elementary School, La Jolla, CA, Science and Discovery Day - Director.**
- 2017 – 2022 **Torrey Pines Elementary School, La Jolla, CA, Technology Chair.**
- 2018 **Muirlands Middle School, La Jolla, CA, Science and Technology Presenter.**

Invited Talks

- 2024 **New Frontiers in Medicine: How AI, XR, and GenAI Are Transforming Precision Care and Clinical Innovation**
Department of Computer Science, University of Southern California (Los Angeles, CA),
October 21st 2024
(Host: Dr. Emilio Ferrara)

- 2023 **Towards Human-centered eXtended Intelligence Interfaces for Time-Critical Tasks**
Telecooperation Lab, TU Darmstadt (Darmstadt, Germany), December 14th 2023
(Host: Dr. Max Mühlhäuser)
- 2023 **UnBIASED: Predicting Implicit Bias in Patient-Provider Interaction**
Osher Institute, UC San Diego (La Jolla, CA), April 12th 2023
(Host: Dr. Jeanne Ferrante)
- 2023 **Design and Development of Human-centered eXtended Intelligence (HXI) Systems**
Meta Reality Lab (Redmond, WA), March 15th 2023
(Host: Dr. Kash Todi)
- 2023 **The UnBIASED Project: Understanding Biased Interaction And Supporting Enhanced Discourse**
Microsoft Research (Redmond, WA), March 15th 2023
(Host: Dr. Mary Czerwinski)
- 2022 **From ARTEMIS to HERMES: Towards Effective Techno-Pedagogical Interactive Surgical Training**
Intuitive Surgical (Sunnyvale, CA), June 6th 2022
(Host: Dr. Sundar Murugappan)
- 2022 **Human-Centered Design for Successful Agile Software Development**
Guide-Rails Developers+ Series, May 25th 2022
(Host: Basheer Janjua)
- 2021 **Mixed Reality in Telemedicine Are we There Yet?**
XCOM Labs (San Diego, CA), September 17th 2021
(Host: Dr. Matt Grob)
- 2021 **HXI: Human-centered eXtended Intelligence**
Big Bright Minds Annual Conference (Irvine, CA), October 28th 2021
(Host: Beth Schnabel)
- 2021 **MedTech Horizons – Rethinking Medical Technology Horizons**
InnovatorMD World Congress 2021, August 5th 2021
(Host: Dr. Uli Chettipally)
- 2021 **Human-Centered and Ubiquitous Computing at UC San Diego**
Intuitive Surgical (Sunnyvale, CA), February 24th 2021
(Host: Dr. Sundar Murugappan)
- 2019 **Mixed Reality in Healthcare**
Siemens + Adidas at UCSD, February 13, 2020
(Host: Dr. Henrik Christensen)
- 2019 **Human-Centered Computing for Healthcare**
Samsung Research, Mountain View (CA), September 18, 2019
(Host: Dr. Ebrahim Nemati)
- 2019 **Human-Centered Design of Extended Reality Collaborative Aids for Medical Interventions**
Intuitive Surgical Research Symposium, Intuitive Surgical (Sunnyvale, CA), January 30th 2019
(Host: Dr. Simon DiMaio)

- 2018 **Human-Centered Computing to the Rescue**
ETH Zurich (Switzerland), June 1st 2018
(Host: Dr. Moira Norrie)
- 2018 **Sensing – Understanding – Intervening: a Human-Centered Approach to Designing new Healthcare Technology**
IBM TJ Watson Research Center, Yorktown Heights (NY), May 25th 2018
(Host: Dr. Erhan Bilal)
- 2018 **PIRC-Net: Twitter-based on demand public health framework for HIV risk estimation**
SoCal Social Workshop, UC Irvine, May 11th 2018
(Host: Dr. Chen Li)
- 2017 **Sensing->Understanding-> Intervening: Human-Centered and Ubiquitous Computing for Health**
University of Texas Houston (TX), October 25th 2017
(Host: Dr. Elmer Bernstam)
- 2017 **Videogames to the rescue. Game Changer: Ubiquitous Computing for Health at UC Dan Diego**
San Diego Fleet Science Museum, San Diego (CA) October 12 2017
(Host: Andrea Decker)
- 2017 **Human-Centered and Ubiquitous Computing for Healthcare**
Microsoft Research, Redmond (WA), August 31st 2017
(Host: Dr. Desney Tan)
- 2017 **Sensing (and making sense of) Health: From Computational Ethnography to the UbiScope**
University of California Irvine, Department of Informatics, February 24, 2017
(Host: Dr. Yunan Chen)
- 2016 **Computational Ethnography and Multimodal Sensing for Healthcare**
Institute for Neural Computation (INC) Chalk Talk Series, UC San Diego, Feb 18th 2016
(Host: Dr. Leanne Chukoskie)
- 2015 **Analyzing Social Media to Characterize Local HIV At-risk Populations**
AIDS Clinical Rounds, Antiviral Research Center (AVRC), UC San Diego, Sept 11th 2015
(Host: Dr. Susan Little)
- 2015 **Multimodal Sensing and Visualization for Healthcare**
Centro de Investigacion Cientifica y de Education Superior de Ensenada (CICESE), Ensenada, BC, Mexico, August 21st 2015
(Host: Dr. Monica Tentori and Dr. Jesus Favela)
- 2014 **Ethical dimensions of mobile health devices in research**
SRA Conference 2014, Coronado, CA, October 21st 2014
(Host: Society of Research Administrators International)
- 2014 **Use of Mobile Technologies in Health Research: Exploring mHealth Ethics**
Biomedical Ethics Seminar, UC San Diego, February 19th 2014
(Host: Dr. Mary Devereaux)

- 2014 **Human-Computer Interaction for Health: Challenges and Opportunities for Multimodal Health Information Systems**
HEC Lausanne, University of Lausanne, Switzerland, February 4th 2014
(Host: Dr. Christine Legner)
- 2013 **Interactive Information Visualization for Neurobehavioral HIV research**
Center For AIDS Research, Neurobehavioral Scientific Focus Group, UC San Diego, December 5th 2013
(Host: Dr. Steven Woods and Dr. Igor Grant)
- 2013 **Human-Centered Computing for Critical Multimodal Cyber-Physical Environments**
IDIAP Research Institute, Martigny, Switzerland, November 5th 2013
(Host: Dr. Hervé Bourlard)
- 2013 **Prevention of HIV Through better Data Visualization**
Center For AIDS Research, Prevention Science Scientific Focus Group, UC San Diego, July 16th 2013
(Host: Dr. Susan Little)
- 2012 **Authoring Pen and Paper Language Activities**
Faculty of Informatics, University of Lugano, Switzerland, Dec 17th 2012
(Host: Dr. Elisa Rubegni and Dr. Monica Landoni)
- 2012 **Ubiquitous Sketching (Am I Drawing Now?)**
Experimental Drawing Studio, Visual Arts Department, UC San Diego, USA Dec 4th 2012
(Host: Dr. Amy Adler)
- 2012 **Multimodal Interfaces and Interaction for Physical/Digital Information Spaces: Applications in Healthcare**
Center for Wireless Population Health Systems, Calit2, San Diego, USA July 27th 2012
(Host: Dr. Kevin Patrick)
- 2012 **On Paper, Walls and Desks: Exploring Interactions Beyond the Desktop**
Berkeley Multi-Surface Workshop 2012, Berkeley Institute of Design, UC Berkeley, USA, May 15th 2012 (Hosts: Dr. Bjoern Hartman, Dr. Michel Beaudouin-Lafon, Dr. Wendy Mackay, Dr. Clemens Klokmoose)
- 2012 **The Medical Office of the Future**
Electronic Health Records Workshop, VA San Diego Health Services R&D, La Jolla, USA, February 22nd 2012 (Host: Dr. Zia Agha)
- 2012 **On Walls, Desks, Paper, Fingers: Interactions around Physical and Digital Interfaces**
SIGCHI Chapter Paris, France, February 2nd 2012
(Hosts: Dr. Michel Beaudouin-Lafon, Dr. Wendy Mackay)
- 2012 **Extended Pen+ Tools for Multimodal Analysis and Interaction**
IDIAP Research Institute, Martigny, Switzerland, January 31st 2012
(Host: Dr. Hervé Bourlard)
- 2012 **Pen and Paper Computing: an old Technology in a modern World**
CRAFT Lab, EPFL Lausanne, Switzerland, January 30th 2012
(Host: Dr. Pierre Dillenbourg)

- 2011 **Technology in Context: should we keep the man in the loop?**
Introductory Keynote – 4th International Conference of Computer Science (CiComp), Ensenada, Mexico, November 3rd 2011
- 2011 **Paper-Based Links for Cross-Media Information Spaces**
FX Palo Alto Laboratory, Palo Alto, CA, USA, February 16th 2011
(Host: Dr. Chunyuan Liao)
- 2010 **Pen and Paper Everywhere**
Faculty of Informatics, Università della Svizzera Italiana (USI), Lugano, Switzerland, December 14th 2010
(Host: Dr. Marc Langheinrich)
- 2010 **Pen Computing in the Wild**
Department of Informatics, University of Zurich, Switzerland, December 10th 2010 (Host: Prof. Elaine Huang)
- 2010 **PenPointing at UCSD - 1 year of pen-based research in and around San Diego**
DCog-HCI Lab, University of California San Diego (UCSD), October 20th 2010
(Host: Dr. Jim Hollan, Prof. Ed Hutchins)
- 2009 **Beyond Simple Paper-Digital Interfaces**
Livescribe Headquarters, Oakland, CA, December 1st 2009
- 2009 **iPaper @ UCSD**
Ubiquitous Computing and Social Dynamics Meeting, University of California San Diego (UCSD), October 15th 2009
(Host: Dr. Bill Griswold)
- 2009 **Interplay of Paper and Digital Documents**
DCog-HCI Lab, University of California San Diego (UCSD), April 1st 2009
(Host: Dr. Jim Hollan, Dr. Ed Hutchins)
- Interactive Paper: Supporting Interactions across the Paper-Digital Divide**
SBB IT Developer Day, Muntelier, Switzerland, December 16th 2008
- 2008 **Interactive Paper: Supporting Interactions across the Paper-Digital Divide**
Jazoon08, The International Conference on Java Technology, Zurich, Switzerland, June 24th 2008

Exhibitions and Digital Arts

CrowdCave Interactive Installation

Initiative for Digital Exploration of Arts and Science (IDEAS), UC San Diego, La Jolla, USA, June 15th 2015 (with Emily Grenader and Danilo Gasques-Rodrigues)

VideoMob Interactive Installation

UC San Diego Filmatic Festival, La Jolla, USA, April 24-27th 2014 (with Emily Grenader, Danilo Gasques-Rodrigues and Fernando Nos)

Carried Array

Athenaeum Music & Arts Library, La Jolla, USA, Nov 9- Dec 28th 2013 (with Emily Grenader, Danilo Gasques-Rodrigues and Fernando Nos)

Generosa Enterprise, Visioni sul Monte

Monte, Valle di Muggio, Switzerland, Jul-Aug 2006 (with Curt-Walter Tannhäuser, Beat Signer and Moira Norrie)

Generosa Enterprise, Welten des Wissens

Exhibition for the ETH Zurich 150 Years Jubilee, Platzspitz Zurich, Switzerland, April-May 2005 (with Curt-Walter Tannhäuser, Beat Signer and Moira Norrie)

Lost Cosmonauts

Artists in Lab Exhibition ETH Zurich, Switzerland, December 2004 (with Axel Vogelsang, Beat Signer and Moira Norrie)

Teaching

University of California San Diego, USA

Course Director, Instructor of Record

Spring 2024	CSE 217: Human-Centered Computing for Health, Instructor.
Spring 2023-24	CSE 165: 3D User Interfaces, Instructor.
Winter 2024–25	DSC 266R: Human-Centered AI, Instructor.
Spring 2021–23	CSE 190/291: Human-Centered Computing for Health, Instructor.
Winter 2021–25	WES 237a: Introduction to Embedded System Design, Instructor.
Winter 2017–20	CSE 190/291: Human-Computer Interaction for Health, Instructor.
Fall 2012–24	CSE 118: Applications in Ubiquitous Computing, Instructor.
Fall 2014–2024	CSE 218: Advanced Topics in Software Engineering, Instructor.
Spring 2014–2016	COGS 121: Human-Computer Interaction Programming Studio, Instructor.

Guest Lectures

Winter 2024	MED 265: Informatics in Clinical Settings, Assessment of Clinical User Needs.
Winter 2023	MED 265: Informatics in Clinical Settings, Assessment of Clinical User Needs.
Spring 2022	DSGN 201: Human-Centered Design and Complex Sociotechnical Systems, Human-centered eXtended Intelligence: Exploring the design space of AI and XR applied to Health and Healthcare.
Spring 2021	MED 265: Informatics in Clinical Settings, Assessment of Clinical User Needs.
Fall 2021	School of Medicine Innovation in Healthcare, Human-Centered Design for Health.
Fall 2020	School of Medicine Innovation in Healthcare, Human-Centered Design for Health.
Fall 2019	School of Medicine Innovation in Healthcare, Human-Centered Design for Health.
Winter 2019	MED 265: Informatics in Clinical Settings, Assessment of Clinical User Needs.
Fall 2018	School of Medicine Innovation in Healthcare, Human-Centered Design for Health.
Winter 2018	MED 265: Informatics in Clinical Settings, Assessment of Clinical User Needs .
Fall 2017	School of Medicine Innovation in Healthcare, Human-Centered Design for Health.
Fall 2017	School of Medicine Innovation in Healthcare, Ubiquitous Computing in Healthcare.
Winter 2016	DSE 241: Data Visualization, Exploratory data analysis and visual analytics for public health.

- Winter 2015 **MED 265: Informatics in Clinical Settings**, *Assessment of Clinical User Needs*.
- Summer 2012 **MUS 116: Radiohead, Björk and Jazz: The Two Way Flow of Improvisation**, *Improvisation and Tangible User Interfaces, the case of the ReacTable*.
- Winter 2012 **COGS 91: SCANS, Careers in Cognitive Science**, *Pen and Paper Computing in the Wild*.
- Winter 2012 **COGS 121: Human Computer Interaction Programming**, *Developing Rich and Social Web-based Applications*.
- Fall 2011 **COGS 120: Human Computer Interaction**, *Paper Computing, old technology in a modern world*.
- Fall 2011 **CSE 118: Applications in UbiComp**, *Pen and Paper Interfaces*.
- Fall 2010 **CSE 118: Applications in UbiComp**, *Hands on Digital Pen and Paper*.
- Fall 2010 **COGS 120: Human Computer Interaction**, *DCog-HCI projects – Digital Pen and Paper*.
- Winter 2010 **COGS 120: Human Computer Interaction**, *Interactive Paper: Technologies, Applications and Opportunities*.
- Supervisor of Laboratory and Seminar Courses*
- Spring 2011 **COGS 102c: Cognitive Design**.
- Winter 2011 **COGS 220: Information Visualization Seminar**.
- Spring 2010 **COGS 102c: Cognitive Design**.
- Winter 2010 **COGS 220: Information Visualization Seminar**.

ETH Zurich, Switzerland

Lecturer

- Summer 2007 **Web Engineering**, *Guest Lecture: From Web to Mobile and Social Information Systems*.
- Summer 2006 **Web Engineering**, *Guest Lecture: From Web to Mobile and Social Information Systems*.

Teaching Assistant

- Spring 2007–08 + Summer 2006 **Computer Supported Cooperative Work**, *Seminar Supervision*.
- Fall 2007 + Winter 2005–07 **Information Systems (Advanced Course)**, *Tutorial*.
- Summer 2005–07 **Informatics II for Civil Engineers**, *Tutorial*.
- Winter 2005–07 **Mobile and Personal Information Systems**, *Laboratory*.
- Winter 2004–06 **Advanced Topics in Information Systems**, *Seminar Supervision*.
- Summer 2005 **Global Information Systems**, *Tutorial*.

Centro Professionale Trevano / AIET Gordola, Switzerland

Lecturer

- 2008/2009 **Network Engineering**, *Exam preparation courses*, *Instructor*.
- 2003/2004 **Introduction to Databases and Information Systems**, *Instructor*.
- 2003/2004 **Network Engineering for network technicians**, *Instructor*.

Nadir Weibel – University of California San Diego – La Jolla CA, 92093-0404, USA

☎ +1 (858) 534-8637 • ✉ weibel@ucsd.edu • 🌐 weibel.ucsd.edu

2003/2004 **Mathematics for mechanical draughtsmen, Instructor.**

Student Advisor

University of California San Diego, USA

Ph.D. and MFA Students

- 2024 – Present **Aaron Broukhim**, *Dept. of Computer Science and Engineering*, Ph.D. Committee Chair.
- 2022 – Present **Manas Bedmutha**, *Dept. of Computer Science and Engineering*, Ph.D. Committee Chair.
- 2023 – Present **Robert Kaufmann**, *Dept. of Cognitive Science*, Ph.D. Committee Co-Chair.
- 2022 – Present **Weichen Liu**, *Dept. of Computer Science and Engineering*, Ph.D. Committee Chair.
- 2020 – Present **Chen Chen**, *Dept. of Computer Science and Engineering*, Ph.D. Committee Chair.
- 2020 – Present **Matin Yarmand**, *Dept. of Computer Science and Engineering*, Ph.D. Committee Chair.
-
- 2021 – 2023 **Menghe Zhang**, *Dept. of Computer Science and Engineering*, Ph.D. Committee Co-Chair.
- 2018 – 2023 **Janet Johnson**, *Dept. of Computer Science and Engineering*, Ph.D. Committee Chair.
- 2017 – 2023 **Danilo Gasques**, *Dept. of Computer Science and Engineering*, Ph.D. Committee Chair.
- 2015 – 2022 **Steven Rick**, *Dept. of Computer Science and Engineering*, Ph.D. Committee Chair.
- 2020 – 2022 **Naba Rizvi**, *Dept. of Computer Science and Engineering*, Ph.D. Committee Chair.
- 2020 – 2022 **Thomas Sharkey**, *Dept. of Computer Science and Engineering*, Ph.D. Committee Chair.
- 2016 – 2020 **Vish Ramesh**, *Dept. of Bioengineering*, Ph.D. Committee Chair.
-
- 2024 – Present **Luo Wenshan**, *Dept. of Computer Science and Engineering*, Ph.D. Committee Member, Committee Chair: Pat Pannuto.
- 2023 – 2024 **Varun Viswanath**, *Dept. of Electrical and Computer Engineerin*, Ph.D. Committee Member, Committee Chair: Edward Wang.
- 2023 – Present **Jessica De Souza**, *Dept. of Electrical and Computer Engineerin*, Ph.D. Committee Member, Committee Chair: Edward Wang.
- 2023 – Present **Yinan Xuan**, *Dept. of Electrical and Computer Engineerin*, Ph.D. Committee Member, Committee Chair: Edward Wang.
- 2022 – 2023 **Chris D'Ambrosia**, *Dept. of Computer Science and Engineering*, Ph.D. Committee Member, Committee Chair: Henrik Christensen.
- 2021 – 2023 **Khalil Mrini**, *Dept. of Computer Science and Engineering*, Ph.D. Committee Member, Committee Chair: Ndapa Nakashole.
- 2017 – 2018 **Yonatan Vaizman**, *Dept. of Electrical and Computer Engineering*, Ph.D. Committee Member, Committee Chair: Gert Lanckriet.
- 2014 – 2017 **Katherine Ellis**, *Dept. of Electrical and Computer Engineering*, Ph.D. Committee Member, Committee Chair: Gert Lanckriet.
- 2014 – 2018 **Adam Rule**, *Dept. of Cognitive Science*, Advisor, Committee Chair: James D. Hollan.
- 2013 – 2017 **Gina Merchant**, *Dept. of Family and Preventive Medicine*, Ph.D. Committee Member, Committee Chair: Kevin Patrick.

- 2009 – 2015 **Laura Pina**, *Dept. of Computer Science and Engineering*, Ph.D. Committee Member, Committee Chair: William G. Griswold.
- 2013 – 2014 **Emily Grenader**, *Dept. of Visual Arts*, MFA Committee Member, Committee Chair: Amy Adler.
- 2009 – 2013 **Adam Fouse**, *Dept. of Cognitive Science*, Graduated in February 2013, PhD. Advisor: James D. Hollan.
- 2009 – 2011 **Anne Marie Piper**, *Dept. of Cognitive Science*, Graduated in May 2011, PhD. Advisor: James D. Hollan.
- 2009 – 2011 **Lisa Cowan**, *Dept. of Computer Science and Engineering*, Graduated in May 2011, PhD. Advisor: William G. Griswold.

Master Students

- 2021 – 2022 Manas Bedmutha, Florence Wu, , Hollie David.
- 2020 – 2021 Alexander Schonken, Zhuoqun Robin Xu, Florence Wu, Hollie David, Zhiwei Ren.
- 2019 – 2020 Alexander Schonken, Zhuoqun Robin Xu.
- 2019 – 2020 Zhuoqun Robin Xu, Wanze Xie.
- 2018 – 2019 Wanze, Xie, Ajay Mohan.
- 2017 – 2018 Amarnath Vysyaraju, Ru Wang, Ajay Mohan.
- 2016 – 2017 Angie Nguyen, Ajay Mohan, Ruchika Shivaswamy, Yashank Sakhardande, Albert Chu, Reshul Surendra Dani, Xueyang Li, Rahul Ramath, Rajat Sharma, Divya Aggarwal, Calvin Gomez, Janet Johnson, Gubbala Madhuri, Amey Paranjape, Khalid.
- 2015 – 2016 Ankur Jain, Nida Hussain, Vish Ramesh, Mustafa Hussain (Florida Poly).
- 2015 – 2016 Li Qi, Chenfu Xie, Purvi Desai, Pallavi Agarwal, Vincent Chan.
- 2014 – 2015 Narendran Thangarajan, Pavan Kumar Pavagada Nagaraja, Chenfu Xie, Daniel Kaulen (RWTH Aachen), Haouan Li, Yu Xia, Brian Anderson, Yingyan Hua.
- 2013 – 2014 Sandy Law, Constantine Chen, Amell Ali Alghamdi.
- 2012 – 2013 Julia Lin, Yang Liu, Ryan Kanoknukulchai, Shimona Carvalho.

Undergraduate Honors Thesis

- September 2013 – June 2014 **Ram Dixit**, *Dept. of Cognitive Science*, Workflow in Clinical Settings.
- September 2011 – June 2012 **Matthew Hong**, *Dept. of Cognitive Science*, Multimodal Cues for Desktop Workspace Interaction: Microanalysis of Active Reading Behaviors, Graduated in June 2012, now at Carnegie-Mellon University.
- September 2010 – June 2011 **Arvind Satyanarayan**, *Dept. of Computer Science and Engineering*, Using an Overlay Interface to Effectively Interact with Large Wall Displays, Graduated in June 2011, now at Stanford.
- September 2010 – June 2011 **Amanda Lazar**, *Dept. of Electrical Engineering*, Web-based Interfaces for Authoring Multimodal Paper-Digital Documents, Graduated in June 2011, now at University of Washington.
- September 2010 – June 2011 **Amanda Legge**, *Dept. of Cognitive Science*, Representing Audio Narrations of Photos, Graduated in June 2011.

- October 2009 – **Nastasha Tan**, *Dept. of Cognitive Science*, Understanding How Different Life-Logs Support
June 2010 Our Memory for the Past, Graduated in June 2010, now at IDEO.
- October 2009 – **Brendan Jonesrebandt**, *Dept. of Cognitive Science*, Event Segmentation of Life-Logging
June 2010 Technologies, Graduated in June 2010.

[ETH Zurich, Switzerland](#)

[Master Theses](#)

- 2007 – 2008 **Monica Frisoni, Patrick Ponti**, *Dept. of Computer Science*.

[Bachelor Theses / Term Projects](#)

- 2007 – 2008 **Hermann Hofstetter (University of Konstanz, Germany), Patrick Ponti**, *Dept. of Computer Science*.
- 2006 – 2007 **Monica Frisoni**, *Dept. of Computer Science*.
- 2005 – 2006 **Patrick Ponti, Sandra Brockmann**, *Dept. of Computer Science*.