

# HERMAN SAKSONO, PH.D.

Assistant Professor, Northeastern University  
h.saksono@northeastern.edu – hermansaksono.com

## EMPLOYMENTS

---

<b>Northeastern University</b> , Boston, U.S. <i>Bowvé College of Health Sciences and Khoury College of Computer Sciences</i> Assistant Professor (Full-time)	08/22/2022 - Present
<b>Harvard University</b> , Cambridge, U.S. <i>Center for Research on Computation and Society</i> Postdoctoral Research Fellow (Full-time)	09/01/2020 - 08/21/2022
<b>Universitas Gadjah Mada</b> , Indonesia E-Learning Coordinator (Full-time)	09/01/2008 - 07/31/2012

## EDUCATION

---

<b>Northeastern University</b> , Boston, U.S. Ph.D. in Computer Science (Khoury College of Computer Sciences) Thesis: <i>A Social Cognition Framework for Interpersonal Informatics in Families</i> Committee: Andrea G. Parker, Stephen Intille, Magy Seif El-Nasr, and Sean Munson (UW).	2020
M.S. in Computer Science (Khoury College of Computer Sciences) with Fulbright scholarship	2014
<b>Universitas Gadjah Mada</b> , Indonesia B.Eng. in Electrical Engineering (Faculty of Engineering)	2007

## RESEARCH INTEREST

---

**Human-Computer Interaction (HCI), Digital Health Equity, and Personal Health Informatics.** I investigate how to design technologies that help address health disparities. I examine how health technologies can catalyze social interactions that help people to manage their health and wellbeing as collective efforts. I have been conducting the entire user-centered design process by designing, building, and evaluating innovative health technologies in collaboration with local community partners.

## RESEARCH - PUBLICATIONS

---

Note: In computer and information sciences, conferences are also top-tier publishing venues comparable to journals. See: <http://portal.acm.org/citation.cfm?id=1743546.1743569>.

### Peer-reviewed Articles in Journals and Conferences

- [1] **Herman Saksono** and Andrea G. Parker. 2024. Socio-Cognitive Framework for Personal Informatics: A Preliminary Framework for Socially-Enabled Health Technologies. *ACM Trans. Comput.-Hum. Interact.* 31, 3, Article 42 (June 2024), 41 pages.
- [2] **Herman Saksono**, Vivien Morris, Andrea G. Parker, Krysztof Gajos. 2023. Evaluating Similarity Variables for Peer Matching in Digital Health Storytelling. In *Proc. ACM Hum.-Comput. Interact.* 7, CSCW2, Article 269 (October 2023), 25 pages.

- [3] **Herman Saksono**, Carmen Castaneda-Sceppa, Jessica A. Hoffman, Magy Seif El-Nasr, Andrea G. Parker. 2021. StoryMap: Using Social Modeling and Self-Modeling to Support Physical Activity Among Families of Low-SES Backgrounds. In *CHI Conference on Human Factors in Computing Systems Proceedings (CHI 2021)*. ACM, New York, NY, USA, 19 pages. [26% acceptance rate].  
**Honorable Mention, Best Paper Award (top 5% of submissions)**
- [4] Xin Yao Lin, **Herman Saksono**, Elizabeth Stowell, Margie Lachman, Carmen Castaneda-Sceppa, Andrea G. Parker. 2020. Go&Grow: An Evaluation of a Pervasive Social Exergame for Caregivers of Loved Ones with Dementia. In *Proc. ACM Hum.-Comput. Interact.* 4, CSCW2, Article 151 (October 2020), 28 pages.
- [5] **Herman Saksono**, Carmen Castaneda-Sceppa, Jessica Hoffman, Vivien Morris, Magy Seif El-Nasr, Andrea G. Parker. 2020. Storywell: Designing for Family Fitness App Motivation by Using Social Rewards and Reflection. In *CHI Conference on Human Factors in Computing Systems Proceedings (CHI 2020)*, April 25-30, 2020, Honolulu, Hawaii, US. ACM, New York, NY, USA, 13 pages. [24.3% acceptance rate]
- [6] **Herman Saksono**, Carmen Castaneda-Sceppa, Jessica Hoffman, Magy Seif El-Nasr, Vivien Morris, Andrea G. Parker. 2019. Social Reflections on Fitness Tracking Data: A Study with Families in Low-SES Neighborhoods. In *CHI Conference on Human Factors in Computing Systems Proceedings (CHI 2019)*, May 4-9, 2019, Glasgow, Scotland UK. ACM, New York, NY, USA, 14 pages. [23.8% acceptance rate]
- [7] **Herman Saksono**, Carmen Castaneda-Sceppa, Jessica Hoffman, Magy Seif El-Nasr, Vivien Morris, Andrea G. Parker. 2018. Family Health Promotion in Low-SES Neighborhoods: A Two-Month Study of Wearable Activity Tracking. In *Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems (CHI '18)*. ACM, New York, NY, USA, Paper 309, 13 pages. [26% acceptance rate]
- [8] Elizabeth Stowell, Mercedes C. Lyson, **Herman Saksono**, René C. Wurth, Holly Jimison, Misha Pavel, Andrea G. Parker. 2018. Designing and Evaluating mHealth Interventions for Vulnerable Populations: A Systematic Review. In *Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems (CHI '18)*. ACM, New York, NY, USA, Paper 15, 17 pages. [26% acceptance rate].  
**Honorable Mention, Best Paper Award (top 5% of submissions)**
- [9] **Herman Saksono**, Andrea G. Parker. 2017. Reflective Informatics Through Family Storytelling: Self-Discovering Physical Activity Predictors. In *Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems (CHI '17)*. ACM, New York, NY, USA, 5232-5244. [25% acceptance rate]
- [10] Farnaz Irannejad Bisafar, **Herman Saksono**, and Andrea G. Parker. 2016. Youth Advocacy in SNAs: Challenges for Addressing Health Disparities. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '16)*. ACM, New York, NY, USA, 3620-3624. [23% acceptance rate]
- [11] **Herman Saksono**, Ashwini Ranade, Geeta Kamarthi, Carmen Castaneda-Sceppa, Jessica Hoffman, Andrea G. Parker. 2015. Spaceship Launch: Designing a Collaborative Exergame for Families. In *Proceedings of the 18th ACM Conference of Computer-Supported Cooperative Work and Social Computing (CSCW '15)*. ACM, New York, NY, USA, 1776-1787. [28% acceptance rate]

## Book Chapters

- [1] **Herman Saksono**. 2022. User-Centered Design in AI for Social Impact. In *AI for Social Impact*. Milind Tambe, Fei Fang, and Bryan Wilder (eds.). <https://ai4sibook.org/>

- [2] Andrea G. Parker, **Herman Saksono**, Jessica A. Hoffman, and Carmen Castaneda-Sceppa. 2017. A Community Health Orientation for Wellness Technology Design & Delivery. In *Designing Healthcare That Works: A Sociotechnical Approach*. Mark Ackerman, Sean Goggins, Thomas Herrmann, Michael Prilla and Christian Stary (eds.). Academic Press, Elsevier Inc. 59-76. ISBN 9780128125830

## Correspondence

- [1] Renee Wurth and **Herman Saksono**. 2021. Community power could boost confidence in vaccination programmes. *Nature*. 2021 Jan; 589(7841):198. doi: 10.1038/d41586-021-00049-4.

## Workshop Position Papers

- [1] **Herman Saksono**. 2023. Scaling Up Personal Informatics Tools for Community Health. In *Bridging HCI and Implementation Science for Innovation Adoption and Public Health Impact* workshop at *CHI 2023*.
- [2] **Herman Saksono**. 2022. Storytelling as Means of Health Information Sharing in Marginalized Communities. In *Information-Seeking, Finding Identity: Exploring the Role of Online Health Information in Illness Experience* workshop at *CSCW 2022*.
- [3] **Herman Saksono**. 2022. Just-in-Time Adaptive Reflections for Supporting Physical Activity. In *Grand Challenges for Personal Informatics and AI* workshop at *CHI 2022*.
- [4] **Herman Saksono**. 2021. An Online Health Community for Preventive Health Behavior. In *The Future of Research on Online Health Communities: Discussing Membership, Structure, and Support* at *CSCW 2021*.
- [5] **Herman Saksono**. 2021. Algorithmic Patient Matching in Peer Support Systems for Hospital Inpatients. In *Realizing AI in Healthcare: Challenges Appearing in the Wild* at *CHI 2021*.
- [6] **Herman Saksono**. 2021. TRANSFORMATIVE-FAIR AI for Addressing the Societal Origins of Marginalization. In *AI Technology for the Margins: A Multidisciplinary Design Agenda* at *CHI 2021*.
- [7] **Herman Saksono**. 2020. Asset-Based Insights on Designing Fitness Promotion Techs in Boston's Low-SES Neighborhoods. In *From Needs to Strengths: Operationalizing an Assets-Based Design of Technology* at *CSCW 2020*.
- [8] **Herman Saksono**, Teresa O'Leary, Andrea G. Parker. 2020. Physical Activity Technology for Supporting Mental Health in Families. In *Technology Ecosystems: Rethinking Resources for Mental Health* at *CHI 2020*.
- [9] Farnaz Irannejad Bisafar and **Herman Saksono**. 2019. Health Advocacy on Social Networking Applications: Co-Designing With Youth of Ethnic and Racial Minority. 2019. *Social Technologies for Digital Wellbeing Among Marginalized Communities* at *CSCW 2019*.
- [10] **Herman Saksono** and Andrea G. Parker. 2019. Designing for Psychological Needs in Fitness Tracking: Supporting Engagement and Adherence. *WISH'19 Original Research Paper, Workgroup on Interactive System in Health* at *CHI 2019*.
- [11] **Herman Saksono** and Andrea G. Parker. Ecological Factors of Long-Term Family Physical Activity Tracking. 2018. *Workshop on Next Steps Towards Long-Term Self Tracking* at *CHI 2018*.
- [12] **Herman Saksono** and Andrea G. Parker. 2017. Storytelling as Space for Reflection on Parent and Child's Physical Activity Data. *Quantified Data and Social Relationships Workshop* at *CHI 2017*.
- [13] Elizabeth Stowell, Mercedes C. Lyson, René C. Wurth, **Herman Saksono**, Holly Jimison, Misha Pavel, Andrea G. Parker. 2016. mHealth Research in Vulnerable Populations: A Systematic Review. *WISH'16 Poster, Workgroup on Interactive System in Health* at *CHI 2016*.

- [14] **Herman Saksono** and Andrea G. Parker. 2015. Health data-driven storytelling for physical activity promotion in families. *Moving Beyond e-Health and the Quantified Self* at CSCW 2015.

### Abstracts Presented as Posters

- [1] **Herman Saksono**, Andrea G. Parker. Storytelling as a Platform for Health Sensor Data Reflection and Physical Activity Promotion in a Family Setting. 2016. *Forum on Population Health Equity. Harvard T.H. Chan School of Public Health.*
- [2] Elizabeth Stowell, Mercedes Lyson, Rene Wurth, **Herman Saksono**, Holly Jimison, Misha Pavel, Andrea G. Parker. mHealth Research in Vulnerable Populations: A Systematic Review. 2016. *Forum on Population Health Equity. Harvard T.H. Chan School of Public Health.*
- [3] Ashwini Ranade, **Herman Saksono**, Andrea Grimes Parker, et al. Community-driven technology intervention promoting physical activity in a low-income neighborhood. 2014. *142nd APHA Annual Meeting.*

### RESEARCH - GRANTS

---

**Google Health Equity Research Initiatives**, Google

PI: *Dr. Herman Saksono*, Co-PI: *Dr. Jessica Hoffman*

**Title:** *Augmenting Fitness Tracking Data with Community Storytelling to Advance the Impact of Wearables in Promoting Health Equity.* **Amount:** *\$49,670 in cash gift and \$30,900 in Fitbit devices*

### RESEARCH - AWARDS AND HONORS

---

**Honorable Mentions, Best Paper Award**, ACM CHI 2018, 2021  
Honored to exceptional articles in CHI publications (Top 5% of submissions).

**Dean's Fellowship**, Northeastern University 2014 - 2015  
Offered to the most outstanding Ph.D. students who demonstrate exceptional academic promise.

**Fulbright M.S. Scholarship**, U.S. Department of State 2012-2014  
International educational exchange program sponsored by the U.S. government.

**Google's Internet at Liberty conference fellow**, Google 2012  
Conference to bring together NGOs, academics, governments and corporations focused on the many issues of internet liberty and creative ways to address these challenges.

### RESEARCH - INVITED TALKS

---

**UMass Amherst**, U.S. April 2024  
Title: *"Storytelling in Health Informatics"*  
Guest lecture for *INFO490PI Personal Health Informatics*, instructor: Dr. Ravi Karkar.

**BostonCHI**, Boston, U.S. February 2024  
Title: *"Storytelling in Health Informatics"*

**University of Maryland**, U.S. November 2023  
HCIL BBL Seminar  
Title: *"Health Storytelling Informatics"*

- Yale University, U.S.** February 2023  
 Title: “*Social Health Informatics*”  
 Guest lecture for *User-Centered Design of Digital Health Tools*, instructor: Dr. Terika McCall.
- Harvard University, U.S.** November 2022  
 Title: “*User-centered Design for AI and Social Impact in Health*”  
 Guest lecture for *AI for Social Impact*, instructor: Dr. Milind Tambe
- Yale University, U.S.** March 2022  
 Title: “*User-Centered Design for Enhancing Health Equity*”  
 Guest lecture for *User-Centered Design of Digital Health Tools*, instructor: Dr. Terika McCall.
- Columbia University, Department of Biomedical Informatics, U.S.** March 2022  
 Title: “*Social Health Informatics*”
- University of Michigan, School of Information, U.S.** February 2022  
 Title: “*Social Health Informatics for Health Equity*”
- University of Washington, U.S.** September 2021  
 Clinical Informatics & Patient-Centered Technologies Keynote  
 Title: “*The Sociality of Personal Health Informatics*”
- DUB Seminar February 2021  
 Title: “*Interpersonal Health Informatics: The Characteristics of Social Personal Informatics*”
- Harvard University, U.S.** Spring 2021  
 Title: “*Designing Techs for Countering The Societal Origins of Injustices*”  
 Guest lecture for *Design of Useful and Usable Interactive Systems*, instructor: Dr. Elena Glassman
- Title: “*Designing Techs for Countering The Societal Origins of Health Disparities*” Spring 2021  
 Guest lecture for *AI for Social Impact*, instructor: Dr. Milind Tambe.
- Northeastern University, U.S.** Fall 2019  
 Title: “*Self-Determination Theory and Motivation*”  
 Guest lecture for *Theory and Methods in HCI*, instructor: Dr. Magy Seif El-Nasr
- Title: “*Envisioning and Paper Prototyping*” Fall 2019  
 Guest lecture for *Human Computer Interaction*, instructor: Stefán Ólafsson.
- Title: “*Health Technology Design*” Fall 2019  
 Guest lecture for *Society, Behavior and Health*, instructor: Dr. Chris Chanyasulkit.

## CREATIVE ACTIVITY - INTERPRETATION

---

- Museum of Fine Arts, Boston, U.S.** October 2023 – January 2024  
 Title: “*Javanese Dancer*”  
 Anti-colonialist textual interpretation of Sargent’s painting for MFA’s *Fashioned by Sargent* exhibition.

## TEACHING & ADVISING - COURSES

---

### Northeastern University, U.S.

Computer-Human Interaction (CS 5340, graduate), Instructor of record (37 students)	Spring 2024
Society, Behavior, & Health (PHTH 6204, graduate), Instructor of record (13 students)	Fall 2023
Society, Behavior, & Health (PHTH 6204, graduate), Instructor of record (24 students)	Spring 2023

## TEACHING & ADVISING - STUDENTS SUPERVISED

---

### PhD Advising

- Naomi Ruchugo (*Personal Health Informatics PhD, Northeastern University*)

### Thesis or Dissertation Committees

- Syarifah Rose (Dissertation panel member, *Monash University Malaysia*)

### Master's Students, Research Assistants

- Nano Liklikadze (*MS in CS, Northeastern University*)
- Arushi Singh (*MFA in Information Design and Visualization, Northeastern University*)
- Renee Black (*Public Health, Northeastern University*)
- Krrish Mittal (*Computer Science, Northeastern University*)
- Amritansh Tripathi (*Computer Science, Northeastern University*)
- Syed Aman Alam (*Computer Science, Northeastern University*)
- Raj Kukadia (*Computer Science, Northeastern University*)

### Undergraduate Students, Capstone Projects

- Amanda Carreiro (*Health Sciences 2018, capstone, Northeastern University*). Title: *Storywell App Spanish Back-Translation*)
- Johnothon Smiley (*Health Sciences 2014, Northeastern University*)
- Chloe Eng (*Health Sciences 2014, capstone, Northeastern University*)

### Undergraduate Students, Research Assistants

- Andrea Nurko (*Northeastern University*)
- Emma Fitzgerald (*Northeastern University*)
- Joyce Tian (*Applied Mathematics, Harvard University*)
- Nur Selin Akbulut (*Health Sciences, Northeastern University*)
- Sarina Dass (*Data Science, Northeastern University*)
- Shreya Singh (*Computer Science, Northeastern University*)
- Lilian Ngweta (*CRA-W DREU visiting undergrad from Arizona State University*)
- Bahar Haji-Sheikhi (*Computer Science, Northeastern University*)
- Parul Sharma (*Computer Science, Northeastern University*)

## SERVICE TO THE INSTITUTION

---

### Northeastern University

2020-2023

- Personal Health Informatics PhD Committee, member (2023 - present)

- Digital Health Committee, member (2022-2023)
- Social Justice Steering Committee, member (2023-present)

## Harvard University

2021

- AI for Social Impact Seminar Series (2021), Co-chair

## SERVICE TO THE DISCIPLINE

---

### Editorial (28 papers)

2020-2023

- ACM CHI Papers, Associate Chair (CHI 2022, 2023, 2024)
- ACM CSCW Papers (PACM HCI Journal), Associate Chair (2020-2023)
- Frontiers In Digital Health: Human Factors and Digital Health, Guest Associate Editor (2021-2022)

### Program Committee (10 papers)

2020-2022

- ACM CHI Late-Breaking Work, Associate Chair (2020)
- Pervasive Health, Program Committee member (2020)

### Peer Reviewer (77 papers, 8 posters)

2016-2021

- ACM CHI Papers (2017-2021)
- ACM CSCW Papers (2018-2022)
- IEEE Visualization Papers (2022)
- ACM UbiComp/PACM IMWUT Papers (2017, 2020, 2021, 2022)
- ACM Transactions on Computer-Human Interaction (ToCHI) (2019-2021)
- International Journal of Medical Informatics (2021)
- International Journal of Human-Computer Studies IJHCS (2021-present)
- IEEE Transactions on Games (2019-2020)
- ACM DIS (2018, 2023)
- ACM CHI Play (2018, 2022)
- ACM CHI Late-Breaking Work (2016-2021)

### Seminar, Symposium, and Workshop Organizer

2019-2020

- **WISH 2020 - The Workgroup on Interactive Systems in Health** Nov 2020  
Technology & Logistics Co-chair
- **Social Technologies for Digital Wellbeing Among Marginalized Communities** Nov 2019  
Michael Ann Devito, Ashley Marie Walker, Jeremy Birnholtz, Kathryn Ringland, Kathryn Macapagal, Ashley Kraus, Sean Munson, Calvin Liang, **Herman Saksono**. 2019. Social Technologies for Digital Wellbeing Among Marginalized Communities. *CSCW 2019*. November 10, 2019. Austin, TX. Co-organizer.

## RESEARCH PROJECTS

---

### Unemployment Visualization among Minoritized Populations

2020-

*Project Lead, Harvard University*

*Collaborators: Shahin Jabbari (Drexel University), Hila Bernstein, Ronald Marlow (ABCD)*

- Led the the requirement gathering and inter-institution agreements.
- Led the design and development of the visualization tool.

**Experiential Learning Systems for Promoting Wellness in Low-Income Families** 2016 - 2020

*Graduate Research Assistant, Northeastern University. Grant: NSF CHS #1618406*

*PI: Andrea G. Parker, Co-PIs: Jessica Hoffman, Carmen Sceppa, Magy Seif El-Nasr.*

- Led the user-centered design processes with the PIs.
- Conducted and qualitatively analyzed semi-structured interviews with adult caregivers and children.
- Led the design and the development of a mobile app prototype using Android (Java), Firebase, and Python.
- Mentored computer science and health science students.

**Digital Support for Alzheimers Disease Caregivers** 2016-2019

*Graduate Research Assistant, Northeastern University*

*PI: Margie Lachman (Brandeis U.), NEU Site PI: Carmen Sceppa, Co-I: Andrea G. Parker*

- Led the development of a mobile app prototype using Android (Java).

**Systematic Review on mHealth Interventions for Vulnerable Populations** 2015 - 2018

*Graduate Research Assistant, Northeastern University. Grant: AETNA Foundation.*

*PI: Andrea G. Parker, Co-PIs: Holly Jimison, Misha Pavel.*

- Co-conducted data extraction and quality assessment on a total of 83 research papers

**Community-Driven Technologies for Physical Activity Promotion in Families** 2013-2014

*Graduate Research Assistant, Northeastern University. Grant: Northeastern University Tier 1*

*Lead Co-PI: Andrea G. Parker; Co-PIs: Jessica Hoffman & Carmen Sceppa.*

- Developed a web-based collaborative exercise game using Fitbit API, PHP, and JavaScript.
- Conducted interviews, focus groups, and participatory design workshops with adult caregivers and children.
- Conducted inductive qualitative analysis on the interview data.