

# EUN KYOUNG CHOE

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## 1. Personal Information

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### Academic Appointments at UMD

07/2017–Present    **University of Maryland**, College Park, MD  
Associate Professor & Doctoral Program Director (2020–), College of Information Studies  
Assistant Professor (2017–2020), College of Information Studies  
Affiliate Associate Professor (2020–), Department of Computer Science  
Affiliate Assistant Professor (2018–2020), Department of Computer Science  
Associate Faculty & Founding Member (2020–), Social Data Science Center (SoDa)

### Educational Background

2008–2014        **University of Washington**, Seattle, WA  
PhD in Information Science  
Thesis: *Designing self-monitoring technology to promote data capture and reflection*

2006–2008        **University of California**, Berkeley, CA  
Master of Information Management and Systems

2001–2005        **Korea Advanced Institute of Science and Technology (KAIST)**, Daejeon, Korea  
Bachelor of Science in Industrial Design

### Other Employment

08/2014 – 06/2017    **The Pennsylvania State University**, University Park, PA  
Assistant Professor, College of Information Sciences and Technology (IST)

09/2008 – 08/2014    **University of Washington**, Seattle, Washington  
Graduate Research Assistant & Graduate Teaching Assistant, Information School

06/2012 – 09/2012    **Microsoft Research**, Redmond, Washington  
Research Intern

06/2010 – 09/2010    **Intel Lab**, Seattle, Washington  
Research Intern

07/2008 – 09/2008    **Google**, Kirkland, Washington  
User Experience Design Intern

06/2007 – 08/2007    **Experience Design and Prototyping Lab (EDPL), Motorola Labs**, Schaumburg, Illinois  
Engineering Intern

## 2. Research, Scholarly, Creative, and Professional Activities

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- In all publications, my name is in **bold**.
- Students or postdoctoral scholars are marked with an asterisk (\*); students or postdocs under my direct

supervision (i.e., students for whom I am/was the (co-)advisor as well as students who I actively supervised in a specific project) are marked with a dagger (†).

- In the fields of human-computer interaction and computer science, conference papers often counted as having equal or higher prominence to journal publications. These conference papers are strictly peer-reviewed with at least three external reviewers and have acceptance rates of 30% or lower. For more information on conference selectivity in this field, see <https://dl.acm.org/citation.cfm?id=1743546.1743569>.
- For conferences, acceptance rates appear in [brackets] when available.
- For journals, the most recent impact factor and 5-year impact factor appear in [brackets] when available.

## Books

- b1 Lee, B., Dachsel, R., Isenberg, P., & **Choe, E.K.** (Eds.). (2021). *Mobile Data Visualization*. CRC Press.

## Book Chapters

- bc3 **Choe, E.K.**, Klasnja, P., & Pratt, W. (2021). mHealth and Applications. In Shortliffe, E., & Cimino, J.J. (Eds.), *Biomedical Informatics* (pp. 637–666). Springer, London.
- bc2 Blascheck, T., Bentley, F., **Choe, E.K.**, Horak, T., & Isenberg, P. (2021). Characterizing Glimpseable Visualizations: From Perception to Behavior Change. In Lee, B., Dachsel, R., Isenberg, P., & **Choe, E.K.** (Eds.), *Mobile Data Visualization* (pp. 151–176). CRC Press.
- bc1 Bentley, F., **Choe, E.K.**, Mamykina, L., Stasko, J., & Irani, P. (2021). Evaluating Mobile Visualizations. In Lee, B., Dachsel, R., Isenberg, P., & **Choe, E.K.** (Eds.), *Mobile Data Visualization* (pp. 177–208). CRC Press.

## Refereed Journals

### Refereed Journal Articles (Rigorously Peer Reviewed)

- j17 Oh, C.Y., Luo, Y., St Jean, B., & **Choe, E.K.** (2022). Patients Waiting for Cues: Information Asymmetries and Challenges in Sharing Patient-Generated Data in the Clinic. *Proceedings of the ACM (PACM) on Human-Computer Interaction*, 6(CSCW1), 1–23.
- j16 Cho, H., Choi, D., Kim, D., Kang, W.J., **Choe, E.K.**, & Lee, S.J. (2021). Reflect, not Regret: Understanding Regretful Smartphone Use with App Feature-Level Analysis. *Proceedings of the ACM (PACM) on Human-Computer Interaction*, 5(CSCW2), 1–36. **Best Paper Award & Methods Recognition.**
- j15 Taylor, C.O., Flaks-Manov, N., Ramesh, S., & **Choe, E.K.** (2021). Willingness to Share Wearable Device Data for Research Among Mechanical Turk Workers: Web-Based Survey Study. *Journal of Medical Internet Research*, 23(10), e19789. [Impact Factor: 5.43].
- j14 Mascheroni, A., **Choe, E.K.**, Luo, Y., Marazza, M., Ferlito, C., Caverzasio, S., Mezzanotte, F., Kaelin-Lang, A., Faraci, F., Puiatti, A., & Ratti, P.L. (2021). The SleepFit Tablet Application for Home-Based Clinical Data Collection in Parkinson Disease: User-Centric Development and Usability Study. *Journal of Medical Internet Research (JMIR) mHealth and uHealth* 2021;9(6), e16304. [Impact Factor: 4.77].
- j13 Luo, Y.†, Oh, C.Y.\*, St. Jean B., & **Choe E.K.** (2020). Investigating the Interrelationships Between Patients' Data Tracking Practices, Data Sharing Practices, and their Health Literacy: An Onsite Survey Study. *Journal of Medical Internet Research (JMIR)*, 22(12), e18937. [Impact Factor: 5.43].
- j12 Sandbulte, J.\*, Beck, J., **Choe, E.K.**, & Carroll, J.M. (2020). Inciting Incidents: How Can We Motivate Family Conversations about Health? *International Journal of Human-Computer Interaction (IJHCI)*. [Impact Factor: 1.354 / 5-Year Impact Factor: 1.905]

- j11 Kim, Y.<sup>†</sup>, Jung, H.\*<sup>\*</sup>, Park, J., Kim, Y., Ramasarma, N., Bonato, P., **Choe, E.K.**, Lee, S.I. (2019). Towards the Design of a Ring Sensor-based mHealth System to Achieve Optimal Motor Function in Stroke Survivors. *In Proceedings of the ACM (PACM) on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT)*.
- j10 Ratti, P.L., Faraci, F., Hackethal, S., Mascheroni, A., Ferlito, C., Caverzasio, S., Amato, N., **Choe, E.K.**, Luo, Y., Nunes-Ferreira, P.E., Galati, S. Puiatti, A., & Kaelin-Lang, A. (2019). A New Prospective, Home-Based Monitoring of Motor Symptoms in Parkinson's Disease. *Journal of Parkinson's Disease*, Vol. 9, No. 4, pp. 803–809. [Impact Factor: 3.698 / 5-Year Impact Factor: 3.817]
- j9 Brehmer, M.\*<sup>\*</sup>, Lee, B., Isenberg, P., & **Choe, E.K.** (2019). A Comparative Evaluation of Animation and Small Multiples for Trend Visualization on Mobile Phones. *IEEE Transactions on Visualization & Computer Graphics (In Proceedings of InfoVis 2019)*. [Impact Factor: 3.078]
- j8 **Choe, E.K.**, Duarte, M.E., Suh, H.\*<sup>\*</sup>, Pratt, W., & Kientz, J. (2019). Breaking Bad News: Insights for the Design of Consumer Health Technologies. *Journal of Medical Internet Research Human Factors (JMIR HF) 2019;6(2)*: e8885.
- j7 Kim, Y.<sup>†</sup>, Lee, B., & **Choe, E.K.** (2019). Investigating Data Accessibility of Personal Health Apps. *Journal of the American Medical Informatics Association (JAMIA) 2019 May 1;26(5)*: 412–419. [Impact Factor: 4.29 / 5-Year Impact Factor: 4.54]
- j6 Lee, S.I., Liu, X., Rajan, S., Ramasarma, N., **Choe, E.K.**, & Bonato, P. (2019). A Novel Upper-limb Function Measure Derived from Finger-worn Sensor Data Collected in a Free-living Setting. *PLoS ONE 14(3)*: e0212484. [Impact Factor: 2.76]
- j5 Brehmer, M.\*<sup>\*</sup>, Lee, B., Isenberg, P., & **Choe, E.K.** (2018). Visualizing Ranges over Time on Mobile Phones: A Task-Based Crowdsourced Evaluation. *IEEE Transactions on Visualization & Computer Graphics (In Proceedings of InfoVis 2018)*. [Impact Factor: 3.078] (*InfoVis 2018*) 25(1): 619–629. [Acceptance rate 25.1%]
- j4 Kim, Y-H.<sup>†</sup>, Jeon, J.H.\*<sup>\*</sup>, Lee, B., **Choe, E.K.**, & Seo, J. (2017). OmniTrack: A Flexible Self-Tracking Approach Leveraging Semi-Automated Tracking. *In Proceedings of the ACM (PACM) on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT) 1(3)*: Article 67, 28 pages.
- j3 **Choe, E.K.**, Abdullah, S.\*<sup>\*</sup>, Rabbi, M.\*<sup>\*</sup>, Thomaz, E.\*<sup>\*</sup>, Epstein, D.A.\*<sup>\*</sup>, Kay, M., Cordeiro, F.\*<sup>\*</sup>, Abowd, G.D., Choudhury, T., Fogarty, J., Lee, B., Matthews, M., & Kientz, J.A. (2017). Semi-Automated Tracking: A Balanced Approach for Self-Monitoring Applications. *IEEE Pervasive Computing 16(1)*: 74–84. [Impact Factor: 3.02]
- j2 Ko, P.T.\*<sup>\*</sup>, Kientz, J.A., **Choe, E.K.**, Kay, M., Landis, C.A., & Watson, N.F. (2015). Consumer Sleep Technologies: A Review of the Landscape. *Journal of Clinical Sleep Medicine 11(12)*: 1455–1461. [Impact Factor: 3.396 / 5-Year Impact Factor: 4.216]
- j1 **Choe, E.K.**, Lee, B., & Schraefel, m.c. (2015). Characterizing Visualization Insights from Quantified-Selfers' Personal Data Presentations. *IEEE Computer Graphics and Applications (CG&A) 35(4)*: 28–37. [Impact Factor: 1.64]

### Perspectives, Opinions, and Letters

- p4 Lee, B., **Choe, E.K.**, Isenberg, P., Marriott, K., & Stasko, J. (2020). Reaching Broader Audiences with Data Visualization. *IEEE Computer Graphics and Applications (CG&A), Visualization Viewpoints*.
- p3 **Choe, E.K.** & Lee, B. (2019). Toward Supporting Personalized Tracking Experience in Healthcare. *ACM Interactions 27, 1 (December 2019), 84–87*.
- p2 **Choe, E.K.**, Lee, B., Andersen, T.O., Wilcox, L., & Fitzpatrick, G. (2018). Harnessing the Power of Patient-Generated Data. *IEEE Pervasive Computing 17(2)*: 50–56. [Impact Factor: 3.02]

- p1 Thudt, A.\*, Lee, B., **Choe, E.K.**, & Carpendale, S. (2017). Expanding Research Methods for a Realistic Understanding of Personal Visualization. *IEEE Computer Graphics and Applications (CG&A), Visualization Viewpoints* 37(2): 12–18. [Impact Factor: 1.64]

## Published Conference Proceedings (Rigorously Peer Reviewed & Archival Publications)

- c32 Kim, Y-H.<sup>†</sup>, Chou, D., Lee, B., Danilovich, M., Lazar, A., Conroy, D.E., Kacorri, H., & **Choe, E.K.** (2022). MyMove: Facilitating Older Adults to Collect In-Situ Activity Labels on a Smartwatch with Speech. *In Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI '22)*. [Acceptance rate 24.7%]
- c31 Luo, Y., Kim, Y.H., Lee, B., Hassan, N., & **Choe, E.K.** (2021). FoodScrap: Promoting Rich Data Capture and Reflective Food Journaling Through Speech Input. *In Proceedings of the ACM Conference on Designing Interactive Systems (DIS '21)*, pp. 606–618. [Acceptance rate 24.5%]
- c30 Kim, Y-H.<sup>†</sup>, Lee, B., Srinivasan, A., & **Choe, E.K.** (2021). Data@Hand: Fostering Visual Exploration of Personal Data on Smartphones Leveraging Speech and Touch Interaction. *In Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI '21)*. [Acceptance rate 26.3%] **Honorable Mention Award.**
- c29 Chopra, S.<sup>†</sup>, Zehrungr, R.<sup>†</sup>, Shanmugam, T.A.<sup>†</sup>, & **Choe, E.K.** (2021). Living with Uncertainty and Stigma: Self-Experimentation and Support-Seeking around Polycystic Ovary Syndrome. *In Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI '21)*. [Acceptance rate 26.3%]
- c28 Sandbulte, J., **Choe, E.K.**, Carroll, J.M. (2020). Towards Family-Centered Health Technologies that Support Distributed Families on Sustainable Healthy Practices Together. *In Proceedings of the Association for Information Science and Technology (ASIS&T '20)*, 57(1), e274.
- c27 Luo, Y.<sup>†</sup>, Lee, B., & **Choe, E.K.** (2020). TandemTrack: Shaping Consistent Exercise Experience by Complementing a Mobile App with a Smart Speaker. *In Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI '20)*. [Acceptance rate 24.3%]
- c26 **Choe, E.K.**, Sakamoto, Y.\*, Fatmi, Y.\*, Lee, B., Hurter, C., Haghshenas, A.\*, & Irani, P. (2019). Persuasive Data Videos: Investigating Persuasive Self-Tracking Feedback with Augmented Data Videos. *In Proceedings of the American Medical Informatics Association (AMIA '19)*, 10 pages. [Acceptance rate 34%] **Distinguished Paper Award Nomination.**
- c25 Luo, Y.<sup>†</sup>, Liu, P.<sup>†</sup>, & **Choe, E.K.** (2019). Co-Designing Food Trackers with Dietitians: Identifying Design Opportunities for Food Tracker Customization. *In Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI '19)*, 13 pages. [Acceptance rate 23.8%]
- c24 Kim, Y-H.<sup>†</sup>, **Choe, E.K.**, Lee, B., & Seo, J. (2019). Understanding Personal Productivity: How Knowledge Workers Define, Evaluate, and Reflect on Their Productivity. *In Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI '19)*, 12 pages. [Acceptance rate 23.8%]
- c23 Binda, J.\*, Beck, J., **Choe, E.K.**, & Carroll, J.M. (2019). Turning Points: Motivating Intergenerational Families to Engage on Sustainable Health Information. *In Proceedings of the International Conference on Information (iConference '19)*, 741–753. [Acceptance rate 34%]
- c22 <sup>1</sup>Blair, J.<sup>†</sup>, Luo, Y.<sup>†</sup>, Ma, N.F.\*, Lee, S.\*, & **Choe, E.K.** (2018). OneNote Meal: A Photo-Based Diary Study for Reflective Meal Tracking. *In Proceedings of the American Medical Informatics Association (AMIA '18)*, 252–261.

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<sup>1</sup> Blair, J. and Luo, Y. contributed equally.

- c21 Binda, J.\*, Yuan, C.W.\*, Cope, N.†, Park, H.†, **Choe, E.K.**, & Carroll, J.M. (2018). Supporting Effective Sharing of Health Information among Intergenerational Family Members. *In Proceedings of the EAI International Conference on Pervasive Computing Technologies for Healthcare (PervasiveHealth '18)*, 148–157. [Acceptance rate 24%]
- c20 Luo, Y.†, Lee, B., Wohn, D.Y., Rebar, A.L., Conroy, D.E., & **Choe, E.K.** (2018). Time for Break: Understanding Information Workers' Sedentary Behavior Through a Break Prompting System. *In Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI '18)*, 14 pages. [Acceptance rate 26%]
- c19 Hiniker, A.\*, Lee, B., Sobel, K.\*, & **Choe, E.K.** (2017). Plan and Play: Supporting Intentional Media Use in Early Childhood. *In Proceedings of the ACM Conference on Interaction, Design, and Children (IDC '17)*, 85–95. [Acceptance rate 21%] **Best Paper Award Nomination (top 3 papers)**.
- c18 **Choe, E.K.**, Lee, B., Zhu, H.†, Riche, N.H., Baur, D. (2017). Understanding Self-Reflection: How People Reflect on Personal Data Through Visual Data Exploration. *In Proceedings of the EAI International Conference on Pervasive Computing Technologies for Healthcare (PervasiveHealth '17)*, 173–182. [Acceptance rate 24%]
- c17 Kang, J.†, Binda, J.\*, Agarwal, P.\*, Saconi, B.\*, & **Choe, E.K.** (2017). Fostering User Engagement: Improving Sense of Identity through Cosmetic Customization in Wearable Trackers. *In Proceedings of the EAI International Conference on Pervasive Computing Technologies for Healthcare (PervasiveHealth '17)*, 11–20. [Acceptance rate 24%]
- c16 Zhu, H.†, Luo, Y.†, & **Choe, E.K.** (2017). Making Space for the Quality Care: Opportunities for Technology in Cognitive Behavioral Therapy for Insomnia. *In Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI '17)*, 5773–5786. [Acceptance rate 25%]
- c15 Ren, D.\*, Brehmer, M.\*, Lee, B., Höllerer, T., & **Choe, E.K.** (2017). ChartAccent: Annotation for Data-Driven Storytelling. *In Proceedings of IEEE Pacific Visualization Symposium (PacificVis '17)*, 230–239. [Acceptance rate 29.3%]
- c14 Zhu, H.†, Colgan, J.†, Reddy, M., & **Choe, E.K.** (2016). Sharing Patient-Generated Data in Clinical Practices: An Interview Study. *In Proceedings of the American Medical Informatics Association (AMIA '16)*, 1303–1312. **Distinguished Paper Award Nomination**.
- c13 Kim, Y-H.†, Jeon, J.H.\*, **Choe, E.K.**, Lee, B., Kim, K.\*, & Seo, J. (2016). TimeAware: Leveraging Framing Effects to Enhance Personal Productivity. *In Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI '16)*, 272–283. [Acceptance rate 23%]
- c12 **Choe, E.K.**, Lee, B., Kay, M.\*, Pratt, W., & Kientz, J.A. (2015). SleepTight: Low-burden, Self-monitoring Technology for Capturing and Reflecting on Sleep Behaviors. *In Proceedings of the ACM International Joint Conference on Pervasive and Ubiquitous Computing (UbiComp '15)*, 121–132. [Acceptance rate 23%]
- c11 **Choe, E.K.\***, Lee, N.B.\*, Lee, B., Pratt, W., & Kientz, J.A. (2014). Understanding Quantified-Selfers' Practices in Collecting and Exploring Personal Data. *In Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI '14)*, 1143–1152. [Acceptance rate 22.8%] **Honorable Mention Award**.
- c10 **Choe, E.K.\***, Lee, B., Munson, S.A., Pratt, W., & Kientz, J.A. (2013). Persuasive Performance Feedback: The Effect of Framing on Self-Efficacy. *In Proceedings of the American Medical Informatics Association (AMIA '13)*. [Acceptance rate 35%] **Best Student Paper Nomination**.
- c9 **Choe, E.K.\***, Jung, J., Lee, B., & Fisher, K. (2013). Visual Framing: Nudging People Away From Privacy-Invasive Mobile Apps. *In Proceedings of the International Conference on Human-Computer Interaction (INTERACT '13) (3)*, 74–91. [Acceptance rate 31%]

- c8 **Choe, E.K.\***, Consolvo, S., Jung, J., Harrison, B., Patel, S.N., & Kientz, J.A. (2012). Investigating Receptiveness to Sensing and Inference in the Home Using Sensor Proxies. *In Proceedings of the International Conference on Ubiquitous Computing (UbiComp '12)*, 61–70. [Acceptance rate 19%] **Best Paper Nomination.**
- c7 Kay, M.\*, **Choe, E.K.\***, Shepherd, J.\*, Greenstein, B., Consolvo, S., & Kientz, J.A. (2012). Lullaby: A Capture & Access System for Understanding the Sleep Environment. *In Proceedings of the International Conference on Ubiquitous Computing (UbiComp '12)*, 226–234. [Acceptance rate 19%] **Best Paper Award.**
- c6 **Choe, E.K.\***, Consolvo, S., Jung, J., Harrison, B., & Kientz, J.A. (2011). Living in a Glass House: A Survey of Private Moments in the Home. *In Proceedings of the International Conference on Ubiquitous Computing (UbiComp '11)*, 41–44. [Acceptance rate 17%]
- c5 **Choe, E.K.\***, Consolvo, S., Watson, N.F., & Kientz, J.A. (2011). Opportunities for Computing Technologies to Support Healthy Sleep Behaviors. *In Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI '11)*, 3053–3062. [Acceptance rate 27%]
- c4 Kientz, J.A., **Choe, E.K.\***, Birch, B.\*, Maharaj, R.\*, Fonville, A.\*, Glasson, C.\*, & Mundt, J.\* (2010). Heuristic Evaluation of Persuasive Health Technologies. *In Proceeding of the International Health Informatics Symposium (IHI '10)*, 555–564. [Acceptance rate for oral presentation: 17%]
- c3 Fonville, A.\*, **Choe, E.K.\***, Oldham, S.\*, & Kientz, J.A. (2010). Exploring the Use of Technology in Healthcare Spaces and its Impact on Empathic Communication. *In Proceedings of the International Health Informatics Symposium (IHI '10)*, 497–501. [Acceptance rate for poster presentation: 28%]
- c2 Landry, B.M.\*, **Choe, E.K.\***, McCutcheon, S., & Kientz, J.A. (2010). Post-Traumatic Stress Disorder: Opportunities & Challenges for Computing Technology. *In Proceedings of the International Health Informatics Symposium (IHI '10)*, 780–789. [Acceptance rate for poster presentation: 28%]
- c1 **Choe, E.K.\***, Duarte, M.\*, & Kientz, J.A. (2010). Understanding and Designing Computing Technologies that Convey Concerning Health News. *Proceedings of the International Conference on Design & Emotion (D&E '10)*.

## Conferences, Workshops, and Talks

### Invited Talks

- i32 “Personal Informatics for All: Supporting Diverse Tracking Needs with Personalization.”  
*George Mason University, Dept. of Information Sciences & Technology Seminar.*  
Online (October 2021)
- i31 “Ubiquitous Data Collection: Self-Tracking with Mobile, Wearable, and Embedded Devices.”  
*JIS (Jornadas de Informática en Salud) Go Live HCI Track Invited Speaker.*  
Online (November 2020)
- i30 “Ubiquitous Data Collection: Self-Tracking with Mobile, Wearable, and Embedded Devices.”  
*Korean Institute of Information Scientists and Engineers.*  
Online (October 2020)
- i29 “Ubiquitous Data Collection: Self-Tracking with Mobile, Wearable, and Embedded Devices.”  
*University of Maryland, Social Data Science Center Launch Event.*  
Online (September 2020)
- i28 “Designing for Personalized Tracking Experience.”  
*University of Washington, Design, Use, and Build (DUB) Seminar Series.*  
Seattle, Washington (June 2019)

- i27 "Designing for Personalized Tracking Experience."  
*University of California, Irvine. The Informatics Seminar Series.*  
Irvine, California (May 2019)
- i26 "Designing for Personalized Tracking Experience"  
*University of Maryland, Baltimore County, Interactive Systems Research Center (ISRC) Invited Speaker.*  
Baltimore, Maryland (March 2019)
- i25 "Semi-Automated Tracking: A Balanced Approach for Self-Monitoring"  
*Microsoft Research, Invited Speaker.*  
Redmond, Washington (July 2018)
- i24 "What Patient Share, What Doctors Want Them to Share: Patient-Generated Data in the Clinic"  
*University of Maryland, College Park, HCIL Symposium Keynote.*  
College Park, Maryland (May 2018)
- i23 "Designing a Flexible Personal Data Tracking Tool"  
*University of Maryland, College Park, HCIL BBL.*  
College Park, Maryland (April 2018)
- i22 "Facilitating Self-Reflection on Personal Health Data"  
*Johns Hopkins University, School of Medicine, Division of Health Sciences Informatics Grand Rounds.*  
Baltimore, Maryland (February 2018)
- i21 "Facilitating Self-Reflection on Personal Health Data"  
*Medstar Institute for Innovation, Invited Speaker.*  
Washington DC (January 2018)
- i20 "Designing for Personal Data Reflection"  
*Seoul National University, Computer Science, Department Seminar.*  
Seoul, Korea (December 2017)
- i19 "Participatory Design in Healthcare: Bringing Patients & Clinicians into the Design Process"  
*Hershey Medical Center.*  
Hershey, Pennsylvania (July 2017)
- i18 "Empowering People through Self-Tracking and Personal Data Visualization"  
*Northwestern University, School of Communication.*  
Evanston, Illinois (February 2017)
- i17 "Empowering People through Self-Tracking and Personal Data Visualization"  
*University of Maryland, College Park, College of Information Studies.*  
College Park, Maryland (February 2017)
- i16 "Empowering People through Self-Tracking and Visual Data Exploration"  
*KAIST, Computer Science HCI Colloquium Series.*  
Daejeon, Korea (December 2016)
- i15 "Personal Informatics: Empowering People through Self-knowledge and Reflection"  
*Pennsylvania State University, Biobehavioral Health Colloquium Series.*  
State College, Pennsylvania (October 2016)
- i14 "Empowering People to Improve Their Lives Leveraging Self-Tracking Data"  
*University of Arizona, Department of Computer Science, Colloquium Speaker.*  
Tucson, Arizona (May 2016)

- i13 "What Can We Learn from the Quantified Self Movement?"  
*Kentucky Conference on Health Communication, Distinguished Speaker.*  
Lexington, Kentucky (April 2016)
- i12 "Persuasive Performance Feedback: How to Leverage the Framing Effect in Designing Self-Monitoring Technology"  
*University of Michigan, School of Information, MISC Talk.*  
Ann Arbor, Michigan (December 2015)
- i11 "Quantified Self Movement: From Personal Data to Visualization Insights"  
*SKKU, iSpeaker Distinguished Lecture.*  
Seoul, Korea (May 2015)
- i10 "Design for Change: Self-monitoring Technology for Data Capture and Reflection"  
*Seoul National University, Computer Science, Department Seminar.*  
Seoul, Korea (December 2014)
- i9 "Design for Change: Self-monitoring Technology for Data Capture and Reflection"  
*POSTECH, Department of Computer Science, Department Seminar.*  
Pohang, Korea (December 2014)
- i8 "Design for Change: Self-monitoring Technology for Data Capture and Reflection"  
*KAIST, Department of Industrial Design, Faculty Seminar.*  
Daejeon, Korea (December 2014)
- i7 "Designing Self-monitoring Technology to Promote Healthy Behaviors"  
*Pennsylvania State University, College of Information Sciences and Technology.*  
University Park, Pennsylvania (March 2014)
- i6 "Designing Self-monitoring Technology to Promote Healthy Behaviors"  
*Arizona State University, School of Computing, Informatics, and Decision Systems Engineering.*  
Phoenix, Arizona (March 2014)
- i5 "Designing Self-monitoring Technology to Promote Healthy Behaviors"  
*Indiana University – Purdue University Indianapolis, School of Informatics and Computing.*  
Indianapolis, Indiana (February 2014)
- i4 "Designing Self-monitoring Technology to Promote Healthy Behaviors"  
*University of Washington, Design, Use, and Build (DUB) Seminar Series.*  
Seattle, Washington (February 2014)
- i3 "Self-monitoring Technology to Promote Healthy Sleep Behaviors"  
*Intel Science & Technology Center on Pervasive Computing Retreat.*  
Seattle, Washington (July 2013)
- i2 "Visual Framing: Nudging Toward Better Privacy Decision"  
*Microsoft Research.*  
Redmond, Washington (August 2012)
- i1 "Investigating Receptiveness to Sensing and Inference in the Home Using Sensor Proxies"  
*University of Washington, Design, Use, and Build (DUB) Seminar Series.*  
Seattle, Washington (August 2012)



## Refereed Presentations<sup>2</sup>

- rp11 **Choe, E.K.**, Sakamoto, Y.\*, Fatmi, Y.\*, Lee, B., Hurter, C., Haghshenas, A.\*, & Irani, P. (2019). Persuasive Data Videos: Investigating Persuasive Self-Tracking Feedback with Augmented Data Videos. *In Proceedings of the American Medical Informatics Association (AMIA '19)*, 10 pages. [Acceptance rate 34%] **Distinguished Paper Award Nomination.**
- rp10 **Choe, E.K.**, Lee, B., Zhu, H.†, Riche, N.H., Baur, D. (2017). Understanding Self-Reflection: How People Reflect on Personal Data Through Visual Data Exploration. *Paper presented at the EAI International Conference on Pervasive Computing Technologies for Healthcare (PervasiveHealth '17)*. Barcelona, Spain. [Acceptance rate 24%]
- rp9 **Choe, E.K.**, Lee, B., Kay, M., Pratt, W., & Kientz, J.A. (2015). SleepTight: Low-burden, Self-monitoring Technology for Capturing and Reflecting on Sleep Behaviors. *Paper presented at the ACM International Joint Conference on Pervasive and Ubiquitous Computing (UbiComp '15)*. Osaka, Japan. [Acceptance rate 23%]
- rp8 **Choe, E.K.\***, Lee, N.B.\*, Lee, B., Pratt, W., & Kientz, J.A. (2014). Understanding Quantified-Selfers' Practices in Collecting and Exploring Personal Data. *Paper presented at the ACM Conference on Human Factors in Computing Systems (CHI '14)*. Toronto, Ontario, Canada. [Acceptance rate 22.8%] **Honorable Mention Award.**
- rp7 **Choe, E.K.\***, Lee, B., Munson, S.A., Pratt, W., & Kientz, J.A. (2013). Persuasive Performance Feedback: The Effect of Framing on Self-Efficacy. *Paper presented at the American Medical Informatics Association (AMIA '13)*. Washington D.C. [Acceptance rate 35%] **Best Student Paper Nomination.**
- rp6 **Choe, E.K.\***, Jung, J., Lee, B., & Fisher, K. (2013). Visual Framing: Nudging People Away From Privacy-Invasive Mobile Apps. *Paper presented at the International Conference on Human-Computer Interaction (INTERACT '13)*. Cape Town, South Africa. [Acceptance rate 31%]
- rp5 **Choe, E.K.\***, Consolvo, S., Jung, J., Harrison, B., Patel, S.N., & Kientz, J.A. (2012). Investigating Receptiveness to Sensing and Inference in the Home Using Sensor Proxies. *Paper presented at the International Conference on Ubiquitous Computing (UbiComp '12)*. Pittsburgh, Pennsylvania. [Acceptance rate 19%] **Best Paper Nomination.**
- rp4 **Choe, E.K.\*** (2011). Design of Persuasive Technologies for Healthy Sleep Behavior. *Presented at the International Conference on Ubiquitous Computing (UbiComp '11), Doctoral Colloquium*. Beijing, China.
- rp3 **Choe, E.K.\***, Consolvo, S., Jung, J., Harrison, B., & Kientz, J.A. (2011). Living in a Glass House: A Survey of Private Moments in the Home. *Paper presented at the International Conference on Ubiquitous Computing (UbiComp '11)*. Beijing, China. [Acceptance rate 17%]
- rp2 **Choe, E.K.\***, Consolvo, S., Watson, N.F., & Kientz, J.A. (2011). Opportunities for Computing Technologies to Support Healthy Sleep Behaviors. *Paper presented at the ACM Conference on Human Factors in Computing Systems (CHI '11)*. Vancouver, British Columbia, Canada. [Acceptance rate 27%]
- rp1 **Choe, E.K.\***, Duarte, M.\*, & Kientz, J.A. (2010). Understanding and Designing Computing Technologies that Convey Concerning Health News. *Paper presented at the International Conference on Design & Emotion (D&E '10)*. Chicago, Illinois.

## Refereed Workshop Papers (Lightly Peer Reviewed)

- w10 **Choe, E.K.**, Lee, B., & Hwang, S. (2018). Personal Data Exploration with Speech on Mobile Devices. *Workshop paper at "Multimodal Interaction for Data Visualization" in the ACM International Conference on Advanced Visual*

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<sup>2</sup> To avoid redundancy, this list does not include presentations for conference papers listed in the "Published Conference Proceedings" section that were presented by students or other co-authors.

*Interfaces (AVI '18)*. Grosseto, Italy.

- w9 **Choe, E.K.** (2014). Semi-Automatic Self-Monitoring Technology for Enhancing Self-Awareness and Reducing Data Capture Burden. *NIH Workshop on "Computing Challenges in Future Mobile Health (mHealth) Systems and Applications."* Bethesda, Maryland.
- w8 **Choe, E.K.**, Lee, B., & Kientz, J.A. (2014). Personal Visual Analytics for Self-monitoring. *Workshop paper at "Personal Perspective on Visualization and Visual Analytics" in the ACM DIS 2014 Conference*. Vancouver, British Columbia, Canada.
- w7 **Choe, E.K.\*** (2012). Visual Framing: Nudging Toward Health Behavior Change. *Poster presented at "Workshop on Interactive Systems in Healthcare" (WISH) at AMIA 2012, Chicago, Illinois*.
- w6 Gilbert, M.\*, **Choe, E.K.\***, Lee, M.J.\*, & Kientz, J.A. (2012). Firefly: Designing a Game for Promoting Relaxation Before Sleep. *Poster presented at "Workshop on Interactive Systems in Healthcare" (WISH) at AMIA 2012, Chicago, Illinois*.
- w5 Kay, M.\*, **Choe, E.K.\***, & Kientz, J.A. (2012). Evaluating Zeo and Fitbit for Tracking Sleep Behaviors. *Workshop paper presented at "Evaluating Off-the-Shelf Technologies for Personal Health Monitoring: A Hands-On Workshop" at ACM UbiComp 2012, Pittsburgh, Pennsylvania*.
- w4 Kay, M.\*, **Choe, E.K.\***, Shepherd, J.\*, Greenstein, B., Consolvo, S., & Kientz, J.A. (2012). Lullaby: Capturing the Unconscious in the Sleep Environment. *Workshop paper presented at "Personal Informatics in Practice: Improving Quality of Life Through Data" at CHI 2012, Austin, Texas*.
- w3 Kay, M.\*, **Choe, E.K.\***, Shepherd, J.\*, Greenstein, B., Consolvo, S., Kelley, P.G., & Kientz, J.A. (2011). Lullaby: Environmental Sensing for Sleep Self-Improvement. *Workshop paper presented at "Personal Informatics & HCI: Design, Theory, & Social Implications" at CHI 2011, Vancouver, British Columbia, Canada*.
- w2 Landry, B.M.\*, Kientz, J.A., & **Choe, E.K.\*** (2010). Post Traumatic Stress Disorder: Issues and Opportunities. *Poster presented at "Workshop on Interactive Systems in Healthcare" (WISH) at CHI 2010, Atlanta, Georgia*.
- w1 **Choe, E.K.\***, Duarte, M.\*, & Kientz, J.A. (2010). Empathy in Health Technologies. *Poster presented at "Workshop on Interactive Systems in Healthcare" (WISH) at CHI 2010, Atlanta, Georgia*.

### Refereed Extended Abstracts<sup>3</sup> & Posters (Lightly Peer Reviewed)

- ea7 Smolyak, D.<sup>†</sup>, Lee, B., & **Choe, E.K.** (2018). TandemTrack: Promoting Consistent Exercise Leveraging Multimodal Training and Tracking. *Extended Abstracts of the ACM Conference on Human Factors in Computing Systems (CHI '18), Late Breaking Work Track*. [Acceptance rate 39.9%]
- ea6 Binda, J.<sup>†</sup>, Cope, N.<sup>†</sup>, Park, H.<sup>†</sup>, Yuan, C.W.\*, Carroll, J.M., & **Choe, E.K.** (2017). Intergenerational Sharing of Health Data Among Family Members. *Adjunct Proceedings of the EAI International Conference on Pervasive Computing Technologies for Healthcare (PervasiveHealth '17)*, 468–471.
- ea5 Landis, C.A., **Choe, E.K.**, Kientz, J.A., Thomas, K.A., Kieckhefer, G.M., Heitkemper, M.M., & Vitiello, M.V. (2015). Smartphone Sleep Diary App: Pilot Testing. *Abstract accepted to SLEEP 2015 for poster presentation*.
- ea4 Li, N.\*, Zhao, C.\*, **Choe, E.K.**, & Ritter, F.E. (2015). HHeal: A Personalized Health App for Flu Tracking and Prevention. *Extended Abstracts of the ACM Conference on Human Factors in Computing Systems (CHI '15)*, 1415–1420.

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<sup>3</sup> "Extended Abstracts" are peer-reviewed and are typically included in Adjunct Proceedings.

- ea3 Landis, C.A., **Choe, E.K.**, Kientz, J.A., Thomas, K.A., Kieckhefer, G.M., Heitkemper, M.M., & Vitiello, M.V. (2015). Pilot Testing a Smartphone Sleep Diary App. *Abstract accepted to 48<sup>th</sup> Annual Communicating Nursing Research Conference*.
- ea2 **Choe, E.K.\***, Kientz, J.A., Halko S.\*, Fonville, A.\*, Sakaguchi, D.\*, & Watson, N. (2010). Opportunities for Computing to Support Healthy Sleep Behavior. *Extended Abstracts of the ACM Conference on Human Factors in Computing Systems (CHI '10)*, 3661–3666.
- ea1 **Choe, E.K.\***, Shinohara, K.\*, Chilana, P.K.\*, Dixon, M.\*, & Wobbrock, J.O. (2009). Exploring the Design of Accessible Goal Crossing Desktop Widgets. *Extended Abstracts of the ACM Conference on Human Factors in Computing Systems (CHI '09)*, 3733–3738.

### Non-Refereed Panels (Invited)

- pn1 **Choe, E.K.** (2019). Panelist in “Health Technology and the Impact on Communities” at Public Health Research@Maryland. College Park, Maryland (April 2019).

### Organized Workshops

- ow7 Mamykina, L., Epstein, D.A., Klasnja, P., Spruijt-Metz, D., Meyer, J., Czerwinski, M., Althoff, T., **Choe., E.K.**, De Choudhury, M., & Lim, B.Y. (2022). Grand Challenges in Personal Informatics and AI. *Workshop organized at ACM CHI 2022*. Online.
- ow6 Bartram, L., Carpendale, S., **Choe., E.K.**, Lee, B., & Tory, M. (2021). Human-Data Interaction. *Workshop organized at IEEE VIS 2021*. Online.
- ow5 **Choe, E.K.**, Dachselt, R., Isenberg, P., & Lee, B. (2019). Mobile Data Visualization. *Seminar organized at Dagstuhl Schloss*. July 14–19, 2019. <https://www.dagstuhl.de/19292>. Dagstuhl, Germany.
- ow4 Lazar, A. & **Choe, E.K.** (2018). Building Community Partnerships for Aging Research. *Workshop organized at the Human-Computer Interaction Lab Annual Symposium*. College Park, Maryland.
- ow3 Lee, B., Brehmer, M.\*, Isenberg, P., **Choe, E.K.**, Langner, R.\*, & Dachselt, R. (2018). Data Visualization on Mobile Devices. *Workshop organized at the ACM Conference on Human Factors in Computing Systems (CHI '18)*. Montreal, Quebec, Canada.
- ow2 **Choe, E.K.**, Fitzpatrick, G., Lee, B., & Wilcox, L. (2017). Leveraging Patient-Generated Data for Collaborative Decision Making in Healthcare. *Workshop organized at the EAI International Conference on Pervasive Computing Technologies for Healthcare (PervasiveHealth '17)*. Barcelona, Spain.
- ow1 Connelly, K., Caine, K., Siek, K.A., Kientz, J.A., Kutz, D.O., Hanania, R., Khan, D.U.\*, & **Choe, E.K.\*** (2012). Evaluating Off-the-Shelf Technologies for Personal Health Monitoring: A Hands-On Workshop. *Workshop organized at the International Conference on Ubiquitous Computing (UbiComp '12)*. Pittsburgh, Pennsylvania.

### Technical Report

- t3 Zehrungr, R., Huang, L., Lee, B., & **Choe, E.K.** (2021). Investigating Opportunities to Support Kids’ Agency and Well-being: A Review of Kids’ Wearables. *Technical Report*.
- t2 **Choe, E.K.**, Dachselt, R., Isenberg, P., & Lee, B. (2019). Mobile Data Visualization (Dagstuhl Seminar 19292). *Dagstuhl Reports*.
- t1 Kientz, J.A., **Choe, E.K.\***, & Truong, K.N. (2013). Texting from the Toilet: Mobile Computing Use and Acceptance in Private and Public Restrooms. *Knowledge Media Design Institute, University of Toronto, Technical Report, KMD-13-1*.

## Completed Creative Works and Scholarship

### Software and Applications

- sw7 *Data@Hand*. A speech- and touch-based personal data exploration mobile app. Contributors: Kim, Y-H.<sup>†</sup>, Srinivasan, A., Lee, B., & **Choe, E.K.**
- sw6 *OmniTrack*. An Android-based flexible mobile self-tracking platform for constructing personalized trackers. Contributors: Kim, Y-H.<sup>†</sup>, **Choe, E.K.**, Lee, B., Seo, J.
- sw5 *Time for Break*. A PC-based prompting application that promotes knowledge workers to take regular standing breaks. Contributors: Luo, Y.<sup>†</sup>, Lee, B., Conroy, D., **Choe, E.K.**
- sw4 *ChartAccent*. A web-based chart annotation tool. Contributors: Ren, D.\* , Brehmer, M.\* , Lee, B., Höllerer, T., **Choe, E.K.**
- sw3 *Visualized Self*. A web-based visualization tool for integrating self-tracking data and supporting self-reflection. Contributors: **Choe, E.K.**, Baur, D., Lee, B.
- sw2 *SleepTight*. An Android-based application for self-monitoring of sleep behaviors. Contributors: **Choe, E.K.**, Landis, C., Lee, B., Kientz, J.
- sw1 *Lullaby*. An Android and PC-based sensing application that combines environmental sensing with feedback on the sleep environment. Contributors: Kay, M.\* , **Choe, E.K.\***, Shepherd, J.\* , Greenstein, B., Consolvo, S., Watson, N., Kientz, J.

### Sponsored Research and Programs – Administered by the Office of Research Administration (ORA)

- sr4 National Science Foundation. *CHS: Medium: Collaborative Research: Teachable Activity Trackers for Older Adults*, \$1.2M (UMD: \$1,080,000), 2020-2024, **Choe, E.K.** (Principal Investigator), Lazar, A. (Co-PI), Kacorri, H. (Co-PI), Conroy, D. (Site PI, Penn State).
- sr3 National Institute of Health. NIBIB R01. *Achieving Optimal Motor Function in Stroke Survivors via a Human-Centered Approach to Design an mHealth Platform*, \$2.4M (UMD: \$506,238), 2020-2025, Lee, I. (Principal Investigator, UMass Amherst), Bonato, P. (Site PI, Harvard Medical School), **Choe, E.K.** (Site PI, UMD), Ramasarma, N. (Industry Collaborator, FormSense).
- sr2 National Science Foundation. *CAREER: Advancing Personal Informatics through Semi-Automated and Collaborative Tracking*, \$546,348, 2017–2022, **Choe, E.K.** (Principal Investigator).
- Research Experiences for Undergraduates (REU) Supplements: \$16,000 (2018–2019)
- sr1 National Science Foundation. *CRII:CHS: Enhancing Patient–Clinician Communication through Self-Monitoring Data Sharing*, \$175,000, 2015–2018, **Choe, E.K.** (Principal Investigator).
- Research Experiences for Undergraduates (REU) Supplements: \$16,000 (2017–2018)

### Gifts and Funded Research Not Administered by ORA

- g6 University of Maryland, Division of Research & College of Information Studies. Strategic Growth Fund. *Engaging Seniors in Light Physical Activities with Teachable Interfaces*, \$14,891, 2018–2019, **Choe, E.K.** (Principal Investigator), Kacorri, H. (Co-PI), Lazar, A. (Co-PI).
- g5 University of Maryland, Brain and Behavior Initiative. *Understanding the Role of Negative Affect in Psychosis*

- Using Multimodal Imaging and Wearable Sensors*. (2018–2019). Blanchard, J. (PI), Shackman, A. (Co-PI), **Choe, E.K.** (Co-PI). \$49,880.
- g4 Nokia, University Donation Program. *Leveraging Personal Health Data for Collaborative Medical Decision Making*, €25,000, 2016, **Choe, E.K.** (Principal Investigator). [Declined].
- g3 Pennsylvania State University, College of Information Sciences and Technology. Research Seed Grant. *Intergenerational Collaborative Health Tracking*, \$29,701, 2016–2017, **Choe, E.K.** (Principal Investigator), Carroll, J.M. (Co-PI).
- g2 Microsoft Research. *Visualized Self: Empowering People to Improve Their Lives Leveraging the Data About Themselves*, \$40,000, 2015–2016, **Choe, E.K.** (Principal Investigator).
- g1 Pennsylvania State University, College of Information Sciences and Technology. Research Seed Grant. *Enhancing Patient-Clinician Communication through Self-Monitoring Data Sharing*, \$9,580, 2014–2015, **Choe, E.K.** (Principal Investigator), Sawyer, A.M. (Co-PI), Reddy, M. (Co-PI).

### Research Fellowships, Prizes, and Awards

- 2021 ACM CSCW 2021—Methods Recognition [j16]
- 2021 ACM CSCW 2021—Best Paper Award [j16]
- 2021 ACM SIGCHI 2021—Best of CHI Honorable Mention Award [c30]
- 2019 AMIA 2019—Distinguished Paper Nomination [c26]
- 2019 Microsoft Research Faculty Fellowship Finalist
- 2019 Runner-up, University of Maryland, College Park, Graduate School’s Graduate Faculty Mentor of the Year
- 2017 ACM IDC 2017—Best Paper Award Nomination [c19] (*top 3 papers*)
- 2017 NSF CAREER Award—*Advancing Personal Informatics through Semi-Automated and Collaborative Tracking*
- 2016 Nokia University Donation Award Program Recipient (*declined*)
- 2016 AMIA 2016—Distinguished Paper Nomination [c14]
- 2016 Penn State College of IST Junior Faculty Excellence in Research Award
- 2016 Penn State College of IST Seed Grant Award—*Intergenerational Collaborative Health Tracking*
- 2015 NSF CRII Award—*Enhancing Patient-Clinician Communication through Self-Monitoring Data Sharing*
- 2015 Microsoft Research Grant—*Visualized Self: Empowering People to Improve Their Lives Leveraging the Data About Themselves*
- 2015 NIH 2015 mHealth Summer Training Institutes Scholar
- 2014 Penn State College of IST Seed Grant Award—*Enhancing Patient-Clinician Communication through Self-Monitoring Data Sharing*
- 2014 ACM SIGCHI 2014—Best of CHI Honorable Mention Award [c11]
- 2013 AMIA 2013—Best Student Paper Nomination [c10]
- 2013 Google USA Anita Borg Memorial Scholarship
- 2012 ACM UbiComp 2012—Best Paper Award [c7]
- 2012 ACM UbiComp 2012—Best Paper Nomination [c8]
- 2008 Bears Breaking Boundaries (Design Competition), 2<sup>nd</sup> Place, U.C. Berkeley
- 2006–2008 Cambridge Culture Foundation, Graduate Fellowship Recipient (tuition & stipend for two years)
- 2004 Young Engineers Honor Society, National Academy of Engineering of Korea
- 2003 Steel Furniture Design Competition, Bronze Medal, POSCO

- 2001 Korea Software Awards, 2<sup>nd</sup> Place—Bronze Medal, Ministry of Information and Communication, Korea.
- 2001–2005 Merit-based Government Scholarship, KAIST (tuition & stipend for four years)

### 3. Teaching, Extension, Mentoring, and Advising

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#### Courses Taught

##### University of Maryland, College Park (Instructor)

- INST 408D: Special Topics in Information Science: Designing Patient-Centered Technologies (Undergraduate level; Elective; 3 credits)
  - Spring 2020 (enrollment 28)
- INST 631: Fundamentals of Human-Computer Interaction (Graduate level; Required; 3 credits)
  - Fall 2017 (enrollment 30)
- INST 682 / CMSC838X: Personal Health Informatics & Visualization (Graduate level; Elective; 3 credits)
  - Fall 2021 (enrollment 25)
  - Fall 2020 (enrollment 23)
  - Fall 2019 (enrollment 19)
  - Fall 2018 (enrollment 27)
- INST 711: Interaction Design Studio (Graduate level; Required; 3 credits)
  - Spring 2019 (enrollment 18)
- INST 779 / 828 Reading Seminar: HCI Seminar on Making Data Accessible (Graduate level; 1 credit)
  - Spring 2022 (enrollment 6)
- INST 808: Data Collection In-Situ: Diary Study and Experience Sampling Method (Graduate level; Elective; 3 credits)
  - Spring 2022 (enrollment 16)

##### Pennsylvania State University (Instructor)

- IST 520: Foundations of Human-Centered Design (Graduate level; Required; 3 credits)
  - Spring 2017 (enrollment 19)
- IST 597-003: Design Thinking for Health Technologies (Graduate level; Elective; 3 credits)
  - Fall 2016 (enrollment 13)
- IST 331: Organization and Design of Information Systems: User and System Principles (Intro to HCI course) (Undergraduate level; Required; 3 credits)
  - Spring 2016 (enrollment 54)
  - Spring 2015 (enrollment 45)
- IST 110S: Information, People, and Technology Seminar (Undergraduate level; Required; 3 credits)
  - Spring 2016 (enrollment 29)
  - Fall 2015 (enrollment 24)

##### Seoul National University, Seoul, Korea (Instructor)

- Special Winter School Lecture Series on Foundations of Human-Computer Interaction
  - Winter 2016 (enrollment 23)

##### Yonsei University, Seoul, Korea (Instructor)

- Special Winter School Lecture Series on Human-Computer Interaction and Design Thinking (3 credits)
  - Winter 2014 (enrollment 31)

**University of Washington, Seattle, Washington (Teaching Assistant)**

- INFO 490A/B, Project Capstone I/II  
*Worked with Prof. Andrew J. Ko and Prof. Wanda Pratt*
  - Winter 2013
  - Spring 2013
  - Winter 2012
  - Spring 2012
- IMT 540 A/C, Design Methods for Interaction and Systems  
*Worked with Prof. Julie A. Kientz and Prof. David Hendry*
  - Fall 2011
- INSC 546, Assistive Technology & Inclusive Design  
*Worked with Prof. Julie A. Kientz*
  - Spring 2010
- INFO 360, User-Centered Design  
*Worked with Prof. Julie A. Kientz and Prof. David Hendry*
  - Spring 2009

**University of California, Berkeley, California (Teaching Assistant)**

- I213, User Interface Design and Development  
*Worked with Prof. Tapan Parikh*
  - Spring 2008
- I141, Search Engines: Technology, Society, and Business  
*Worked with Prof. Marti Hearst*
  - Fall 2007

**Teaching Innovations**

**Course or Curriculum Development**

2021	Newly developed INST 808: Data Collection In-Situ: Diary Study and Experience Sampling Method for Master's and Doctoral students
2019	Newly developed INST 639D: Research Through Design for the HCI Master's program
2018–2019	Newly developed and offered INST 711: Interaction Design Studio for the HCI Master's program
2018	Newly developed, cross-listed (with Computer Science), and offered INST 682 / CMSC838X: Personal Health Informatics & Visualization for the iSchool and CS graduate programs
2017	Significantly revised and offered INST 631: Fundamentals of Human-Computer Interaction for the HCI Master's program
2016	Newly developed and offered IST 597-003: Design Thinking for Health Technologies for the iSchool graduate program
2015	Significantly revised and offered IST 331: Organization and Design of Information Systems: User and System Principles for the iSchool undergraduate program

**Advising: Research or Clinical**

### Undergraduate—Independent Study / REU (Research Experiences for Undergraduates) Advisor

01/2015–05/2015	Jihyun Oh, Penn State IST	Independent Study Advisor (IST 496)
01/2015–08/2015	Justin Roth, Penn State IST	Honors Thesis Committee
01/2015–05/2017	Natalie Cope, Penn State IST	Internship Advisor; NSF REU Advisor; co-authored [c21, ea6]
08/2015–05/2017	Hyehyun Park, Penn State IST	Independent Study Advisor (IST 496); co-authored [c21, ea6]
01/2016–05/2017	Olivia Richards, Penn State Mathematics	NASA Pennsylvania Space Grant Undergraduate Fellowship Supervisor
08/2017–05/2018	Daniel Smolyak, UMD Computer Science	NSF REU Advisor; co-authored [ea7]
02/2019–07/2020	Lily Huang, UMD iSchool	NSF REU Advisor
06/2019–08/2019	Tyson Nguyen, UMD iSchool	NSF REU Advisor
11/2019–12/2020	Mengyun Liu, UMD iSchool	Research supervisor
1/2021–5/2021	Abhinav Vedmala, UMD Computer Science	NSF REU Advisor
1/2022–Present	Matthew Falzon, UMD Computer Science	Research supervisor

### Master’s—Research / Independent Study / Master’s Thesis Advisor

09/2009–05/2010	Amanda Fonville, UW iSchool MSIM	Collaborated on [c3, c4, ea2]
03/2013–06/2013	Nicole B. Lee, UW HCDE MS	Collaborated on [c11]
09/2016–12/2016	Ning Ma, Penn State IST MS	Research Advisor; co-authored [c22]
10/2016–05/2017	Pratik Agarwal, Penn State IST MS	Research Advisor; co-authored [c17]
09/2015–05/2017	Yuhan Luo, Penn State IST MS	Master’s Thesis Committee Chair; co-authored [c16, c20, c22, c25] Thesis title: “Understanding Information Workers’ Sedentary Behavior through a Prompting System”
08/2017–05/2018	Shankar Ramesh, UMD iSchool HCIM	Master’s Thesis Committee Co-Chair (with Casey Overby Taylor from Johns Hopkins University); co-authored [j15] Thesis title: “Survey on Health Device Use by mTurk Participants”
05/2018–09/2018	Peiyi Liu, UMD iSchool HCIM	Internship advisor; co-authored [c25]
05/2018–05/2019	Diva Smriti, UMD iSchool HCIM	Master’s Thesis Committee Chair Thesis title: “Designing Technology to Increase Adoption of Healthy Behaviors in Men in the Context of Light Food Consumption”
01/2019–06/2019	Anam Bhatia, UMD iSchool HCIM	Independent Study Advisor
02/2020–05/2020	Amy Asadi, UMD iSchool HCIM	Research Advisor
02/2020–01/2021	Rachael Zehring, UMD CS MS	Research Advisor; co-authored [c29]
2020	Zhehan Xiong	MS in CS Scholarly Paper advisor
2021	David Wang	MS in CS Scholarly Paper advisor
02/2020–05/2021	Shaan Chopra, UMD iSchool HCIM	Master’s Thesis Committee Chair; co-authored [c29] Thesis title: “‘I’m not alone in this’: Co-managing Stigmatized Chronic Health Conditions”



01/2021–12/2021	Matthew Patrick, UMD iSchool HCIM	Master's Thesis Committee Chair Thesis title: "Reasons and Rationalizations for Bedtime Procrastination in University Students"
02/2020–Present	Jarrett Lee, UMD iSchool HCIM	Master's Thesis Committee Chair
01/2021–Present	Diana Chou, UMD CS MS	Research Advisor

#### Master's—Master's Thesis External Committees (non-advisees)

2016	Jun Ge, Penn State IST	M.S. Thesis Committee Member
2017	Rama Adithya Varanasi, Penn State IST	M.S. Thesis Committee Member
2018	Rebecca Stone, UMD iSchool HCIM	M.S. Thesis Committee Member
2018	Alisha Pradhan, UMD iSchool HCIM	M.S. Thesis Committee Member
2019	Biswaksen Patnaik, UMD iSchool HCIM	M.S. Thesis Committee Member
2021	Youngchan Kim, Yonsei University, Korea	M.S. Thesis Committee Member
2022	Amelia Chan Short, UMD iSchool HCIM	M.S. Thesis Committee Member

#### Doctoral—Ph.D. Dissertation Advisor

08/2017–Present	Yuhan Luo, UMD iSchool Ph.D.	Ph.D. Dissertation Advisor
08/2021–Present	Jong Ho Lee, UMD iSchool Ph.D.	Ph.D. Dissertation Advisor
08/2021–Present	Kyungyeon Lee, UMD CS Ph.D.	Ph.D. Dissertation Advisor

#### Doctoral—Internal Review / Proposal / Dissertation Committees (non-advisees)

2015–2017	Elizabeth Eikey, Penn State IST	Ph.D. Dissertation Committee Member
2016–2017	Jiawei Chen, Penn State IST	Ph.D. Dissertation Committee Member
2017–2019	Kenyon Crowley, UMD iSchool	Ph.D. Dissertation Proposal Committee Member Ph.D. Dissertation Defense Committee Member
2017–Present	Andrea Julca, UMD iSchool	Ph.D. First Year Review Committee Member Integrative Paper Review Committee Member Ph.D. Dissertation Proposal Committee Member Ph.D. Dissertation Defense Committee Member
2018–2021	Yuting Liao, UMD iSchool	Integrative Paper Review Committee Member Ph.D. Dissertation Proposal Committee Member Ph.D. Dissertation Defense Committee Member
2018–2020	Sigfried Gold, UMD iSchool	Ph.D. First Year Review Committee Member Ph.D. Integrative Paper Committee Member
2019	Sriram Karthik Badam, UMD Computer Science	Ph.D. Dissertation Defense Committee Member
2020	Brian Ondov, UMD Computer Science	Ph.D. Dissertation Defense Committee Member
2021	Shi Feng, UMD Computer Science	Ph.D. Dissertation Defense Committee Member
2021	Yongle Zhang, UMD iSchool	Integrative Paper Review Committee Member
2021	Rie Kamikubo, UMD iSchool	Ph.D. First Year Review Committee Member
2021	Jian Zheng, UMD iSchool	Ph.D. First Year Review Committee Member
2022	Yimin Xiao, UMD iSchool	Ph.D. First Year Review Committee Member

### Doctoral—External Examiner of Ph.D. Thesis (outside of UMD)

2016	Manal Almalki, University of Melbourne, Australia	Ph.D. Dissertation Committee Member
2016	Dandan Huang, University of Victoria, Canada	Ph.D. Dissertation Committee Member
2015–2018	Allison Doub, Penn State University, USA	Ph.D. Dissertation Committee Member
2017–2019	Stephen MacNeil, University of North Carolina at Charlotte, USA	Ph.D. Dissertation Committee Member
2017–2019	Young-Ho Kim, Seoul National University, Korea	Ph.D. Dissertation Committee Member
2021–Present	Donghan Hu, Virginia Tech, USA	Ph.D. Dissertation Advisory Committee Member

### Post-Doctoral

2019–2021	Young-Ho Kim, Seoul National University (02/2019–08/2019); UMD iSchool (09/2019–11/2021)	Post-Doctoral Advisor
2022–Present	Junhyung Moon, UMD iSchool	Post-Doctoral Advisor

### Other<sup>4</sup>

2015–2016	Joanna Colgan, Penn State Dept of Kinesiology Ph.D. student	Research supervision; co-authored [c14]
2015–2017	Haining Zhu, Penn State IST Ph.D. student	Research supervision; co-authored [c14, c16, c18]
2016–2019	Young-Ho Kim, Seoul National University Dept of Computer Science Ph.D. student	Research supervision; co-authored [c13, c24, j4]
2018–2021	Yoojung Kim, Seoul National University Convergence Science and Technology Ph.D. student	Research supervision; co-authored [j7, j11]
08/2018–01/2020	Pramod Chundury, UMD iSchool Ph.D.	Research supervision
05/2020–07/2021	Hyunsung Cho, KAIST CS MS	Research supervision

### Mentorship

2018–2019	Jasmine Jones, Post-doctoral scholar at University of Minnesota. First permanent position: Assistant Professor at Berea College	Big Ten Academic Alliance Professorial Advancement Initiative to increase the number of underrepresented minority faculty members. Role: Faculty mentor
2020–2021	Ge Gao	iSchool Faculty mentor
2020–2021	Sergii Skakun	iSchool Faculty mentor
2021–2022	Diana Marsh	iSchool Faculty mentor
2021–2022	Hernisa Kacorri	iSchool Faculty mentor

### Advising: Other than Directed Research

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<sup>4</sup> Students with whom I have had significant research interaction on specific projects, in a capacity other than their advisor/co-advisor.

## Professional and Extension Education

### Guest Lectures

- g8 “Personal Data for All”  
*University of Maryland, Guest Lecture for CMSC 396H (Honors Seminar) (March 2021)*
- g7 “Personal Data Visualization 1 & 2”  
*University of Washington, Guest Lectures for INFO 468A (Designing for Personal Health & Wellness) (Nov. 2020)*
- g6 “Designing for Personalized Tracking Experience”  
*University of Maryland, Guest Lecture for INST 408A Consumer Health Informatics (Oct. 2019).*
- g5 “Understanding Self-Reflection: How People Reflect on Personal Data through Visual Data Exploration”  
*University of Maryland, Guest Lecture for INST 728K Consumer Health Informatics (April 2018)*
- g4 “Design Critique”  
*University of Maryland, Guest Lecture for INST 776 HCIM Capstone Project (March 2018)*
- g3 “Visual Communications”  
*University of Maryland, Guest Lecture for INST 776 HCIM Capstone Project (March 2018)*
- g2 “Quantified Self”  
*Penn State University, Guest Lecture for IST 497E Mobile and Ubiquitous Computing (February 2015)*
- g1 “Quantified Self: Knowledge through Data Collection and Reflection”  
*Penn State University, Guest Lecture for IST110H Information, People, and Technology Seminar (November 2014)*

### Other—Tutorials and Courses

- t2 “Data Visualization for UbiComp & ISWC Research”  
**Choe, E.K.**, Isenberg, P., Lee, B.  
*Tutorial accepted for the UbiComp & ISWC 2019. London, UK.*
- t1 “Designing Digital Health Interventions” (2015).  
Hekler, E., Poole, E., Klein, D., **Choe, E.K.**  
*Course offered at the Society of Behavioral Medicine Annual Meeting 2015. San Antonio, Texas.*

## 4. Service and Outreach

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### Editorships, Editorial Boards, and Reviewing Activities

#### Editorial Boards

- ACM IMWUT Associate Editor (2017–2019, 2021–Present)
- Foundations and Trends in Human-Computer Interaction Editor (2020–Present)
- PLoS ONE Guest Editor for a special issue on “Digital Technologies for Health” (2019–2020)

#### Reviewing Activities for Journals and Presses

- Reviewer, ACM Health (2019)

- Reviewer, ACM IMWUT (2017, 2020)
- Reviewer, ACM ToCHI (2015, 2017, 2018, 2019, 2020, 2021, 2022)
- Reviewer, Communications of the ACM (2017, 2018)
- Reviewer, IEEE Pervasive Computing (2011, 2017, 2018, 2021)
- Reviewer, IEEE InfoVis (2014, 2018)
- Reviewer, International Journal of Human-Computer Studies (2015, 2018, 2022)
- Reviewer, JAMIA (2015, 2020)
- Reviewer, Journal of Medical Internet Research (2017, 2020)
- Reviewer, Nature Partner Journal Digital Medicine (2019)
- Reviewer, Personal and Ubiquitous Computing (2019)
- Reviewer, Pervasive and Mobile Computing (2014)
- Reviewer, Psychology of Sport and Exercise (2017)
- Reviewer, Psychology of Sport and Medicine (2017)
- Reviewer, Taylor & Francis Digital Creativity (2018)
- Reviewer, Taylor & Francis Human-Computer Interaction (2014, 2015, 2016, 2019, 2020)

### **Reviewing Activities for Agencies and Foundations & Other Universities**

- Panelist, National Science Foundation
  - Computer and Information Science and Engineering (CISE) (2016, 2018, 2019, 2020, 2021)
  - Smart and Connected Health (2015)
- External Reviewer, Singapore Ministry of Education Academic Research Council (2021)
- Assessment Committee for Faculty Hiring, University of Copenhagen, Denmark (2021)
- External Reviewer, Computing Innovation Fellows (2021)
- External Reviewer, National Sciences and Engineering Research Council of Canada (2019)

### **Reviewing Activities for Conferences**

- Reviewer, ACM CHI (2010, 2011, 2012, 2013, 2014, 2018, 2020)
- Reviewer, ACM CSCW (2014, 2015, 2016, 2017, 2018, 2020)
- Reviewer, ACM DIS (2012, 2014, 2019, 2020)
- Reviewer, ACM ISS (2018)
- Reviewer, ACM Mobile HCI (2015, 2016, 2021)
- Reviewer, ACM UbiComp (2011, 2014)
- Reviewer, ACM UIST (2013, 2015)
- Reviewer, AMIA (2013, 2016)
- Reviewer, EAI Pervasive Health (2010, 2012, 2014, 2015, 2017)
- Reviewer, IEEE HICSS (2010)
- Reviewer, IFIP Interact (2017)
- Reviewer, NordiCHI (2018)

## **Committees, Professional, and Campus Service**

### **Campus Service—College**

- Chair, University of Maryland, iSchool, Ph.D. Program Committee; Doctoral Program Director (2020–Present)
- Member, University of Maryland, iSchool, Professional-track (PTK) Faculty Search Committee (2021–Present)
- Member, University of Maryland, iSchool, Record Preparation Committee (2021–2022)

- Member, University of Maryland, iSchool, Record Preparation Committee (2020–2021)
- Member, University of Maryland, iSchool, Tenured/Tenure-track (TTK) Annual Review Committee (2020, 2021)
- Member, University of Maryland, iSchool, Space Design Committee (2019–2020)
- Member, University of Maryland, iSchool Center for Advances in Data and Measurement (CADM) Committee (2019–2020)
- Member, University of Maryland, iSchool MPowering Health Informatics & Data Science (2017–2018)
- Member, University of Maryland, iSchool, Strategic Planning Committee (2018)
- Member, University of Maryland, Tenured/Tenure-track (TTK) Faculty Search Committee (2017–2018)
- Member, University of Maryland, Human Computer Interaction Masters (HCIM) Program Committee (2017–2019)
- Member, University of Maryland, Research, Centers, and Collaboration (RCC) Committee (2017–2018)
- Member, University of Maryland, Facilities Committee (2017–2018)
- Member, Penn State University, IST, Graduate Advisory Committee (2016–2018)
- Member, Penn State University, IST, HCI Faculty Search Committee (2016–2017)
- Member, Penn State University, IST, Data Science Faculty Search Committee (2015–2016)
- Member, Penn State University, IST, Graduate Recruiting Committee (2014–2015)
- Member, University of Washington, Information School, Ph.D. Admissions Committee (2010–2011)
- Member, University of Washington, Information School, Facilities Committee (2010–2011)

#### **Campus Service—University**

- TTK Faculty Representative for the College of Information Studies, University Senate, University of Maryland, (2019–Present)
- Member, Penn State University, Driving Digital Innovation Committee (2016)

#### **Leadership Roles in Meetings and Conferences<sup>5</sup>**

- Subcommittee Chair for ACM CHI Technical Program Committee – Health (2021–2022)
- Co-Chair for ACM UbiComp Doctoral Colloquium (2021)
- Subcommittee Chair for ACM CHI Technical Program Committee – Health (2020–2021)
- Program Committee for Health Track at the WebConf (2019)
- Associate Chair for ACM CHI Technical Program Committee – Health (2019)
- Co-Chair for ACM UbiComp Doctoral Colloquium (2019)
- Program Committee Member, BELIV (Beyond time and errors: novel evaluation methods for Information Visualization) Workshop (2018)
- Associate Chair for ACM CHI Technical Program Committee – Health, Accessibility, Aging (2017)
- Associate Chair for Pervasive Health Technical Program Committee (2017)
- Associate Chair for ACM UbiComp Workshop Co-Chair (2017)
- Associate Chair for ACM CHI Technical Program Committee – Specific Applications (2016)
- Associate Chair for Pervasive Health Technical Program Committee (2016)
- Associate Chair for ACM UbiComp Technical Program Committee (2016)
- Program Committee Member, BELIV (Beyond time and errors: novel evaluation methods for Information Visualization) Workshop (2016)
- Associate Chair for ACM CHI Technical Program Committee – Specific Applications (2015)
- Associate Chair for ACM UbiComp Technical Program Committee (2015)
- Associate Chair for ACM UbiComp Workshop, “New Frontiers of Quantified Self” (2015)

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<sup>5</sup> Associate Chairs for these conferences typically handle 10-20 papers serving the role of an editor (e.g., recruiting external reviewers, participating in review panel meetings, leading discussions, and writing meta-reviews) or a reviewer.

- Associate Chair for ACM CHI Workshop Track (2015)
- Associate Chair for ACM CHI Work-in-Progress Track (2014)

#### **Other Non-University Committees, Memberships, Panels, etc.**

- Member, Association of Computing Machinery (ACM) (2008-Present)
- Member, American Medical Informatics Association (AMIA) (2013-Present)
- Technical Expert Panelist, Agency for Healthcare Research and Quality (AHRQ)-funded project, *“Advancing the Collection and Use of Patient-Reported Outcomes Through Health Information Technology”* (2018-Present)

#### **Other—Volunteer**

- Student Volunteer, ACM CHI Conference (2009, 2010)
- Student Volunteer, Design & Emotion Conference (2010)
- Seminar Coordinator, University of Washington DUB weekly seminar (Summer 2011)

### **Non-Research Presentations**

#### **Outreach Presentations**

- Panelist, *“Trust and Responsibility in Design”* UXTerp World Interaction Design Day event (September 2019)
- Organizer, *“Come and talk to Alexa to find out what she knows!”* City of College Park Senior Committee/Explorations on Aging Event. College Park, Maryland (April 2019)
- Organizer, Washington DC Quantified Self Meetup. College Park, Maryland (June 2018)
- Speaker, *“On-the-go Productivity Tracking with OmniTrack”* Washington DC Quantified Self Meetup. Baltimore, Maryland (October 2017)
- Panelist, UbiComp 2015: Broadening Participation Workshop. Osaka, Japan (September 2015)