TIM ALTHOFF

Paul G. Allen School of Computer Science & Engineering
University of Washington
Box 352355, 3800 E Stevens Way NE
Seattle, WA 98195, USA

althoff@cs.washington.edu
http://althoff.cs.uw.edu
+1 (650)-485-0758

Research Data science, social network analysis, natural language processing, and applications to well-being

Professional experience

University of Washington, Seattle, WA, USA — 1/2019 – present
Tenure-Track Assistant Professor, Paul G. Allen School of Computer Science & Engineering
Adjunct Assistant Professor, Information School

Stanford University, Stanford, CA, USA — 9/2013 – 9/2018
Research Assistant with Jure Leskovec, Dan Jurafsky, Dan McFarland

Microsoft Research, Redmond, WA, USA — 6/2016 – 9/2016
Research Intern with Eric Horvitz, Ryen White

Google Research, Mountain View, CA, USA — 6/2014 – 9/2014
Research Intern with Kevin Murphy, Xin Luna Dong, Evgeniy Gabrilovich

Google Research, Mountain View, CA, USA — 5/2013 – 8/2013
Research Intern with David Ross

Google Research, Mountain View, CA, USA — 5/2012 – 8/2012
Research Intern with David Ross, Douglas Eck, Hrishikesh Aradhye

University of California, Berkeley, Berkeley, CA, USA — 8/2011 – 5/2012
Visiting Student Researcher with Trevor Darrell

German Research Center for Artificial Intelligence, Kaiserslautern, Germany — 11/2009 – 5/2011
Research Assistant with Adrian Ulges, Damian Borth, Andreas Dengel

German Research Center for Artificial Intelligence, Kaiserslautern, Germany — 5/2009 – 10/2009
Research Assistant with Adrian Ulges, Thomas Breuel

Education

Stanford University, Stanford, CA, USA — 9/2013 – 9/2018
Ph.D. in Computer Science.
Thesis: *Data Science for Human Well-being* (Winner of **SIGKDD Dissertation Award**)
Dissertation committee: Jure Leskovec, Eric Horvitz, Dan Jurafsky, Scott Delp, Trevor Hastie
M.S. in Computer Science (8/2015)

University of Kaiserslautern, Kaiserslautern, Germany — 10/2007 – 7/2013
M.S. in Computer Science. Minor in Cognitive Psychology
Thesis: *Analysis and Forecasting of Trending Topics in Online Media* (won **University-wide Award**)
B.S. in Computer Science. Minor in Mathematics
Thesis: *Scalable Clustering for Hierarchical Content-based Browsing of Large-scale Image Collections*

Publications **Articles in peer-reviewed journals**

[55] Human-AI Collaboration Enables More Empathic Conversations in Text-based Peer-to-Peer Mental Health Support
Ashish Sharma, Inna Lin, Adam Miner, David Atkins, **Tim Althoff**
Nature Machine Intelligence — *2023*

[54] Leveraging Mobile Technology For Public Health Promotion: A Multidisciplinary Perspective
Jennifer L. Hicks, Melissa A. Boswell, **Tim Althoff,** Alia J. Crum, James A. Landay, Joy P. Ku, Paula M.L. Moya, Elizabeth L. Murnane, Michael P. Snyder, Abby C. King, Scott L. Delp
Annual Review of Public Health — *2023*

[53] Mapping User Engagement in Digital Psychotherapy: An Integrative Engagement Model
James M Zech, Morgan Johnson, Michael D Pullman, Thomas D Hull, **Tim Althoff,** Sean A Munson, Nicole Fridling, Boris Litvin, Jerilyn Wu, Patricia A Areán
JMIR Formative Research — *2023*

[52] Disparate Impacts on Online Information Access during the COVID-19 Pandemic
Jina Suh, Eric Horvitz, Ryen W. White, **Tim Althoff**
Nature Communications — *2022*

[51] Estimating the Burden of Influenza on Daily Activity at Population Scale Using Commercial
Wearable Sensors
Aziz Mezlini, Allison Shapiro, Eric J. Daza, Eamon Caddigan, Ernesto Ramirez, **Tim Althoff,**
Luca Foschini
JAMA Network Open — *2022*

[50] Large-scale diet tracking data reveal disparate associations between food environment and diet
Tim Althoff, Hamed Nilforoshan, Jenna Hua, Jure Leskovec
Nature Communications — *2022*

[49] CORAL: COde RepresentAtion Learning with Weakly-Supervised Transformers for Analyzing
Data Analysis
Ge Zhang, Mike Merrill, Yang Liu, Jeff Heer, **Tim Althoff**
EPJ Data Science — *2022*

[48] GLOBEM: Cross-Dataset Generalization of Longitudinal Human Behavior Modeling
Xuhai Xu, Xin Liu, Han Zhang, Weichen Wang, Subgiya Nepal, Kevin S. Kuehn, Jeremy Huckins,
Margaret E. Morris, Paula S. Nurius, Eve A. Riskin, Shwetak Patel, **Tim Althoff,** Andrew Campell,
Anind K. Dey, Jennifer C. Mankoff
IMWUT / UbiComp — *Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiqui-*
tous Technologies, 2022

[47] A computational approach to measure the linguistic characteristics of psychotherapy timing,
responsiveness, and consistency
Adam S Miner, Scott L Fleming, Albert Haque, Jason Fries, **Tim Althoff,** Denise Wilfley, W Stuart
Agras, Arnold Milstein, Jeff Hancock, Steven M Ash, Shannon W Stirman, Bruce A Arnow, Nigam
Shah
npj Mental Health Research — *2022*

[46] Same data, different conclusions: Radical dispersion in empirical results when independent
analysts operationalize and test the same hypothesis
Martin Schweinsberg, ..., **Tim Althoff**, ..., Eric Luis Uhlmann (179 authors total)
Organizational Behavior and Human Decision Processes — *2021*

[45] Daily, weekly, seasonal, and menstrual cycles in female mood, behavior, and vital signs
Emma Pierson, **Tim Althoff**, Daniel Thomas, Paula Hillard, Jure Leskovec
Nature Human Behavior — *2021*

[44] Characterizing COVID-19 and Influenza Illnesses in the Real World via Person-Generated Health
Data
Nikki Marinsek, Allison Shapiro, Ieuan Clay, Ben Bradshaw, Ernesto Ramirez, Jae Min, Andrew
Trister, Yuedong Wang, **Tim Althoff**, Luca Foschini
Cell Patterns — *2021*

[43] Efficient and Explainable Risk Assessments for Imminent Dementia: Insights from an Aging Co-
hort Study
Nicasia Beebe-Wang*, Alexandra Okeson*, **Tim Althoff**[§], Su-In Lee[§] (*[§] equal contribution)
IEEE Journal of Biomedical and Health Informatics — *2021*

[42] Assessing the relationship between routine and schizophrenia symptoms with passively sensed
measures of behavioral stability
Joy He-Yueya, Benjamin Buck, Andrew Campbell, Tanzeem Choudhury, John M Kane, Dror
Ben-Zeev, **Tim Althoff**
NPJ Schizophrenia — *2020*

[41] Leveraging Routine Behavior and Contextually-Filtered Features for Depression Detection among
College Students
Xuhai Xu, Prerna Chikersal, Afsaneh Doryab, Daniella Villalba, Janine M. Dutcher, Michael
Tumminia, **Tim Althoff**, Sheldon Cohen, Kasey Creswell, David Creswell, Jennifer Mankoff,
Anind K. Dey
IMWUT / UbiComp — *Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiqui-*
tous Technologies, 2019

[40] Best Practices for Analyzing Large-scale Health Data from Wearables and Smartphone Apps
Jennifer L. Hicks, **Tim Althoff**, Rok Sosic, Peter Kuhar, Bojan Bostjancic, Abby C. King, Jure Leskovec, Scott L. Delp
NPJ Digital Medicine — *2019*

[39] Psychomotor Function Measured via Online Activity Predicts Motor Vehicle Fatality Risk
Tim Althoff, Eric Horvitz, Ryen W. White
NPJ Digital Medicine — *2018*

[38] Large-scale Physical Activity Data Reveal Worldwide Activity Inequality
Tim Althoff, Rok Sosic, Jennifer L. Hicks, Abby C. King, Scott L. Delp, Jure Leskovec
Nature — *2017*
Top 0.0002% Altmetric Attention Score of 8M articles; Top 0.002% among Nature articles

[37] Population-scale Pervasive Health
Tim Althoff
IEEE Pervasive Computing — *2017*

[36] Influence of Pokémon Go on Physical Activity: Study and Implications
Tim Althoff, Ryen W. White, Eric Horvitz
JMIR — *Journal of Medical Internet Research (JMIR), 2016*
Top 0.001% Altmetric Attention Score of 8M articles

[35] Natural Language Processing for Mental Health: Large Scale Discourse Analysis of Counseling Conversations
Tim Althoff*, Kevin Clark*, Jure Leskovec (* equal contribution)
TACL — *Transactions of the Association for Computational Linguistics (TACL), 2016*
🏆 **International Medical Informatics Association Best Paper Award for best paper on clinical natural language processing in 2016**

Articles in peer-reviewed conference proceedings

[34] Homekit2020: A Benchmark for Time Series Classification on a Large Mobile Sensing Dataset with Laboratory Tested Ground Truth of Influenza Infections
Mike A Merrill, Esteban Safranchik, Arinbjörn Kolbeinsson, Piyusha Gade, Ernesto Ramirez, Ludwig Schmidt, Luca Foschini, **Tim Althoff**
CHIL — *Conference on Health, Inference, and Learning (accepted,* 2023

[33] Self-Supervised Pretraining and Transfer Learning Enable Flu and COVID-19 Predictions in Small Mobile Sensing Datasets
Mike Merrill, **Tim Althoff**
CHIL — *Conference on Health, Inference, and Learning (accepted,* 2023

[32] Understanding and Supporting Debugging Workflows in Multiverse Analysis
Ken Gu, Eunice Jun, **Tim Althoff**
CHI — *ACM CHI Conference on Human Factors in Computing Systems,* 2023

[31] GLOBEM: Multi-Year Datasets for Longitudinal Human Behavior Modeling Generalization
Xuhai Xu, Han Zhang, Yasaman Sefidgar, Xin Liu, Woosuk Seo, Jennifer Brown, Yiyi Ren, Kevin Kuehn, Mike Merrill, Paula Nurius, Anne Browning, Shwetak Patel, **Tim Althoff,** Magaret E. Morris, Eve Riskin, Jennifer Mankoff, Anind K. Dey
NeurIPS — *36th Conference on Neural Information Processing Systems,* 2022

[30] Gendered Mental Health Stigma in Masked Language Models
Inna Wanyin Lin*, Lucille Njoo*, Anjalie Field, Ashish Sharma, Katharina Reinecke, **Tim Althoff**, Yulia Tsvetkov
EMNLP — *Conference on Empirical Methods in Natural Language Processing,* 2022

[29] What Makes Online Communities 'Better'? Measuring Values, Consensus, and Conflict across Thousands of Subreddits
Galen Weld, Amy Zhang, **Tim Althoff**
ICWSM — *16th International AAAI Conference on Weblogs and Social Media,* 2022

[28] Adjusting for Confounders with Text: Challenges and an Empirical Evaluation Framework for Causal Inference
Galen Weld*, Peter West*, Maria Glenski, David Arbour, Ryen Rossi, **Tim Althoff**
ICWSM — *16th International AAAI Conference on Weblogs and Social Media,* 2022

[27] Towards Facilitating Empathic Conversations in Online Mental Health Support: A Reinforcement Learning Approach (Extended Abstract)
Ashish Sharma, Inna Lin, Adam Miner, David Atkins, **Tim Althoff**
IJCAI — 31st Intl. Joint C. on Artificial Intelligence – Sister Conference Best Paper Track, 2022

[26] MULTIVERSE: Mining Collective Data Science Knowledge from Code on the Web to Suggest Alternative Data Analysis Approaches
Mike Merrill, Ge Zhang, **Tim Althoff**
KDD — 27th International ACM Conference on Knowledge Discovery and Data Mining, 2021

[25] Political Bias and Factualness in News Sharing across more than 100,000 Online Communities
Galen Weld, Maria Glenski, **Tim Althoff**
ICWSM — 15th International AAAI Conference on Weblogs and Social Media, 2021
🏆 **Best Paper Award for Outstanding Analysis Paper**

[24] The Effect of Moderation on Online Mental Health Conversations
David Wadden, Tal August, Qisheng Li, **Tim Althoff**
ICWSM — 15th International AAAI Conference on Weblogs and Social Media, 2021
🏆 **Best Paper Award for Outstanding Study Design**

[23] Towards Facilitating Empathic Conversations in Online Mental Health Support: A Reinforcement Learning Approach
Ashish Sharma, Inna Lin, Adam Miner, David Atkins, **Tim Althoff**
WWW/WebConf — 30th International World Wide Web Conference, 2021
🏆 **Best Paper Award (single award across all 1736 submissions)**

[22] Online Mobile App Usage as an Indicator of Sleep Behavior and Job Performance
Chunjong Park, Morelle Arian, Xin Liu, Leon Sasson, Jeffrey Khan, Shwetak Patel, Alex Mariakakis, **Tim Althoff**
WWW/WebConf — 30th International World Wide Web Conference, 2021

[21] Population-Scale Study of Human Needs During the COVID-19 Pandemic:
Analysis and Implications
Jina Suh, Eric Horvitz, Ryen White, **Tim Althoff**
WSDM — 14th ACM International Conference on Web Search and Data Mining, 2021

[20] A Computational Approach to Understanding Empathy Expressed in Text-Based Mental Health Support
Ashish Sharma, Adam Miner, David Atkins, **Tim Althoff**
EMNLP — Conference on Empirical Methods in Natural Language Processing, 2020

[19] Boba: Authoring and Visualizing Multiverse Analyses
Yang Liu, Alex Kale, **Tim Althoff**, Jeff Heer
VAST — IEEE Visual Analytics Science and Technology (VAST), 2020

[18] Data-Driven Implications for Translating Evidence-Based Psychotherapies into
Technology-Delivered Interventions
Jessica Schroeder, Jina Suh, Chelsey Wilks, Mary Czerwinski, Sean Munson, James Fogarty, **Tim Althoff**
PH — EAI PervasiveHealth, 2020

[17] Engagement Patterns of Peer-to-Peer Interactions on Mental Health Platforms:
A Case-Study of TalkLife
Ashish Sharma, Monojit Choudhury, **Tim Althoff**, Amit Sharma
ICWSM — 14th International AAAI Conference on Weblogs and Social Media, 2020

[16] Paths Explored, Paths Omitted, Paths Obscured: Decision Points & Selective Reporting in End-to-End Data Analysis
Yang Liu, **Tim Althoff**, Jeff Heer
CHI — ACM CHI Conference on Human Factors in Computing Systems, 2020

[15] Passively-sensed Behavioral Correlates of Discrimination Events in College Students
Yasaman S. Sefidgar, Woosuk Seo, Kevin S. Kuehn, **Tim Althoff**, Anne Browning, Eve Riskin, Paula S. Nurius, Anind K. Dey, Jennifer Mankoff
CSCW — 22nd Conference on Computer-Supported Cooperative Work & Social Computing, 2019

[14] Goal-setting And Achievement In Activity Tracking Apps: A Case Study Of MyFitnessPal
Mitchell Gordon, **Tim Althoff**, Jure Leskovec
WWW/WebConf — *28th International World Wide Web Conference,* 2019

[13] Modeling Interdependent and Periodic Real-World Action Sequences
Takeshi Kurashima, **Tim Althoff**, Jure Leskovec
WWW — *27th International World Wide Web Conference,* 2018

[12] Modeling Individual Cyclic Variation in Human Behavior
Emma Pierson, **Tim Althoff**, Jure Leskovec
WWW — *27th International World Wide Web Conference,* 2018

[11] I'll be back: On the Multiple Lives of Users of a Mobile Activity Tracking Application
Zhiyuan Lin, **Tim Althoff**, Jure Leskovec
WWW — *27th International World Wide Web Conference,* 2018

[10] Harnessing the Web for Population-Scale Physiological Sensing: A Case Study of Sleep and Performance
Tim Althoff, Ryen W. White, Eric Horvitz, Jamie Zeitzer
WWW — *26th International World Wide Web Conference,* 2017

[9] How Gamification Affects Physical Activity: Large-scale Analysis of Walking Challenges in a Mobile Application
Ali Shameli, **Tim Althoff**, Amin Saberi, Jure Leskovec
WWW — *26th International World Wide Web Conference,* 2017

[8] Online Actions with Offline Impact: How Online Social Networks Influence Online and Offline User Behavior
Tim Althoff, Pranav Jindal, Jure Leskovec
WSDM — *10th International ACM Conference on Web Search and Data Mining,* 2017

[7] TimeMachine: Timeline Generation for Knowledge-Base Entities
Tim Althoff, Xin Luna Dong, Kevin Murphy, Safa Alai, Van Dang, Wei Zhang
KDD — *21st International ACM Conference on Knowledge Discovery and Data Mining,* 2015

[6] Donor Retention in Online Crowdfunding Communities: A Case Study of DonorsChoose.org
Tim Althoff, Jure Leskovec
WWW — *24th International World Wide Web Conference,* 2015

[5] How to Ask for a Favor: A Case Study on the Success of Altruistic Requests
Tim Althoff, Cristian Danescu-Niculescu-Mizil, Dan Jurafsky
ICWSM — *8th International AAAI Conference on Weblogs and Social Media,* 2014

[4] Analysis and Forecasting of Trending Topics in Online Media Streams
Tim Althoff, Damian Borth, Jörn Hees, Andreas Dengel
MM — *21st ACM International Conference on Multimedia,* 2013

[3] Detection Bank: An Object Detection Based Video Representation for Multimedia Event Recognition
Tim Althoff, Hyun Oh Song, Trevor Darrell
MM — *20th ACM International Conference on Multimedia,* 2012

[2] Sparselet Models for Efficient Multiclass Object Detection
Hyun Oh Song, Stefan Zickler, **Tim Althoff**, Ross Girshick, Mario Fritz, Christopher Geyer, Pedro Felzenszwalb, Trevor Darrell
ECCV — *12th European Conference on Computer Vision,* 2012

[1] Balanced Clustering for Content-based Image Browsing
Tim Althoff, Adrian Ulges, Andreas Dengel
GI — *Informatiktage 2011, Gesellschaft für Informatik,* 2011

Articles in peer-reviewed workshop proceedings

[W4] Grand Challenges for Personal Informatics and AI
Lena Mamykina, Daniel A. Epstein, Predrag Klasnja, Donna Sprujt-Metz, Jochen Meyer, Mary Czerwinski, **Tim Althoff,** Eun Kyoung Choe, Munmun De Choudhury, Brian Lim
CHI — *CHI Conference on Human Factors in Computing Systems Extended Abstracts,* 2022

[W3] Leveraging Community and Author Context to Explain the Performance and Bias of Text-Based Deception Detection Models
Galen Weld, Ellyn Ayton, **Tim Althoff,** Maria Glenski
NAACL NLP4IF — *NAACL WS on NLP4IF: Censorship, Disinformation, and Propaganda,* 2021
🏆 Best Paper Award

[W2] Learning Individualized Cardiovascular Responses from Large-scale Wearable Sensors Data
Haraldur T. Hallgrímsson, Filip Jankovic, **Tim Althoff,** Luca Foschini
NeurIPS ML4H — *NeurIPS Workshop on Machine Learning for Health,* 2018

[W1] Quantifying Dose Response Relationships Between Physical Activity and Health Using Propensity Scores
Tim Althoff, Rok Sosic, Jennifer L. Hicks, Abby C. King, Scott L. Delp, Jure Leskovec
NeurIPS ML4H — *NeurIPS Workshop on Machine Learning for Health,* 2016

Articles under review

[R7] Cognitive Reframing of Negative Thoughts through Human-Language Model Interaction
Ashish Sharma, Kevin Rushton, Inna Lin, David Wadden, Khendra Lucas, Adam Miner, Theresa Nguyen, **Tim Althoff**

[R6] Scaling Expert Language Models with Unsupervised Domain Discovery
Suchin Gururangan*, Margaret Li*, Mike Lewis, **Tim Althoff,** Noah A. Smith, Luke Zettlemoyer

[R5] Branch-Train-Merge: Embarrassingly Parallel Training of Expert Language Models
Margaret Li*, Suchin Gururangan*, Tim Dettmers, Mike Lewis, **Tim Althoff,** Noah A Smith, Luke Zettlemoyer

[R4] Towards Tailoring Just-in-time Adaptive Intervention Systems for Workplace Stress Reduction
Jina Suh, Esther Howe, Robert Lewis, Javier Hernandez, Koustuv Saha, **Tim Althoff,** Mary Czerwinski

[R3] "I will just have to keep driving": A Mixed-methods Investigation of Thai Motorcycle Rideshare Driver Responses to Poor Air Quality
Nussara Tieanklin*, Joseph Breda*, **Tim Althoff,** Kurtis Heimerl (* equal contribution)

[R2] Natural Language Processing for Mental Health Interventions A Systematic Review
Matteo Malgaroli, Thomas Hull, James Zech, **Tim Althoff**

[R1] Making Online Communities 'Better': A Taxonomy of Community Values on Reddit
Galen Weld, Amy Zhang, **Tim Althoff**

Patents

[P4] Sleep monitoring from implicitly collected computer interactions (2020)
Tim Althoff, Eric Horvitz, Ryen White

[P3] Providing User-Interactive Graphical Timelines (2014)
Tim Althoff, Xin Luna Dong, Kevin Murphy, Safa Alai, Van Dang, Wei Zhang, Evgeniy Gabrilovich

[P2] Adaptive Music and Video Recommendations (2013)
Tim Althoff, David Ross, Huazhong Ning, Mohamad Tarifi, Wes Cheng

[P1] Automatic Music Video Generation Based on Structured Information (2012)
Tim Althoff, David Ross, Douglas Eck, Hrishikesh Aradhye

Awards	**NSF CAREER Award**	10/2022
	Most Highly Rated Instructors in the Allen School 2020-2021	7/2021
	🏆 **Best Paper Award for Outstanding Analysis Paper – ICWSM**	6/2021

For *Political Bias and Factualness in News Sharing across more than 100,000 Online Communities* by *ICWSM*.

🏆 **Best Paper Award for Outstanding Study Design – ICWSM**   6/2021

For *The Effect of Moderation on Online Mental Health Conversations* by *ICWSM*.

🏆 **Best Paper Award – NAACL NLP4IF**   6/2021

For *Leveraging Community and Author Context to Explain the Performance and Bias of Text-Based Deception Detection Models* by *NAACL WS on NLP4IF*.

🏆 **Best Paper Award – WWW/WebConf** 4/2021
For *Towards Facilitating Empathic Conversations in Online Mental Health Support: A Reinforcement Learning Approach* by *WWW/WebConf*. Single award across all 1736 submissions.

Nomination for 2020 Marsha L. Landolt Distinguished Graduate Mentor Award 1/2020
University-wide award recognizing excellent faculty mentors

🏆 **2019 SIGKDD Doctoral Dissertation Award Winner** *ACM SIGKDD* 8/2019
For *Data Science for Human Well-being*
Recognizing excellent research in the field of data science, data mining and knowledge discovery

Kavli Fellow *Kavli Frontiers of Science* at National Academy of Sciences 4/2019

eScience Fellow *University of Washington* 3/2019

Altmetric Top 100 Article 2017 12/2017
For *Large-scale Physical Activity Data Reveal Worldwide Activity Inequality*
Among top 100 public attention scores of over 2 million tracked research outputs in 2017

🏆 **Best Paper Award – Clinical Natural Language Processing 2016** 8/2017
For *Natural Language Processing for Mental Health: Large Scale Discourse Analysis of Counseling Conversations* by *International Medical Informatics Association*
One of five selected among all research papers published in 2016

#1 most tweeted JMIR article 2016; #5 most tweeted JMIR article all time 1/2017
For *Influence of Pokémon Go on Physical Activity: Study and Implications* by *Journal of Medical Internet Research (JMIR)*

Fellow *Digital Ecologies Research Partnership* 5/2014

Grants & gifts

(Sole) PI: National Science Foundation (NSF-IIS CAREER #2142794) 10/2022
  CAREER: Realizing the Potential of Behavioral Data Science for Population Health.
  Total funded amount: $599,173 (2022–2027).

Key Personnel: National Science Foundation (NSF 49100421C0037) 9/2022
  Analysis and Response for Trust Tool (ARTT): Expert-Informed Resources for Individuals and Online Communities to Address Vaccine Hesitancy and Misinformation.
  Co-PIs: Connie Moon Sehat, Franziska Roesner, Amy X. Zhang
  Total funded amount: $749,000; Personal share: $297,000 (2021–2023).

(Sole) PI: Google, unrestricted gift ($30,000) 10/2021

(Sole) PI: Garvey Institute for Brain Health Solutions Innovation Grant. 6/2021
  Improving conversational best practices in online mental health support.
  Total funded amount: $100,000 (2021-2022).

(Sole) PI: Microsoft Research AI for Accessibility Grant. 5/2021
  Supporting Empathy Expression in Long-form Conversation.
  Total funded amount: $205,000 (2021-2022).

(Sole) PI: Office of Naval Research (ONR #N00014-21-1-2154) 4/2021
  Quantifying Effective Scalable Governance across Thousands of Online Communities.
  Total funded amount: $399,501 (2021–2023).

Co-PI: National Institute of Mental Health (NIH #R01MH125179) 1/2021
  Enhancing Engagement with Digital Mental Health Care.
  Total funded amount: $3,161,673; Personal share: $695,567 (2021–2024).

Co-PI: National Science Foundation (NSF-CNS EAGER #2025022) 8/2020
  Partnering with Grab for Cross-ASEAN Regional Urban Insights.
  Total funded amount: $250,000 (2020–2022).

(Sole) PI: Microsoft Research AI for Accessibility Grant. 5/2020
  Human-AI Collaboration to Encourage Empathy in Text-Based Mental Health Support.
  Total funded amount: $200,000 (2020-2021).

(Sole) PI: Bill & Melinda Gates Foundation (INV-004841) 3/2020
  Data Science for Wearables and Public Health.
  Total funded amount: $600,000 (2020-2022).

(Sole) PI: Allen Institute for Artificial Intelligence (AI2), unrestricted gift ($100,000) 3/2020

(Sole) PI: Outreach, unrestricted gift ($100,000) 3/2020

	(Sole) PI: Pacific Northwest National Laboratory (PNNL) ($60,000)	1/2020
	Co-PI: National Science Foundation (NSF-IIS Large #1901386)	9/2019
	Analysis Engineering for Robust End-to-End Data Science.	
	Total funded amount: $3,000,000; Personal share: $786,096 (2019–2024).	
	(Sole) PI: Supportiv, unrestricted gift ($50,000)	8/2019
	(Sole) PI: Adobe Data Science Research Award ($50,000; 5/72 proposals funded)	3/2019
	(Sole) PI: Intel Research - Academic Cluster Computing Grant	2/2019
Fellowships	Stanford Graduate Fellowship, SAP Fellow (tuition + US$41,700 p.a.)	9/2015 – 8/2018
	(awarded to top 3% of Stanford Ph.D. students)	
	Stanford School of Engineering Fellowship (tuition + US$39,400 p.a.)	9/2013 – 6/2014
	Fulbright Scholarship (US$21,500; declined)	8/2011 – 5/2012
	UC Berkeley Scholarship from German Academic Exchange Service (€26,775)	8/2011 – 5/2012
	German National Merit Foundation Scholarship	7/2009 – 7/2013
	(awarded to top-ranked 0.25% of students nationwide; i.a. €3,600 p.a.)	
Advising & mentoring	Vinayak Gupta, Postdoc, U Washington	4/2023 – present
	Xinyi Zhou, Postdoc, U Washington (co-advised w. Amy Zhang)	1/2023 – present
	Ken Gu, Ph.D. student, U Washington	9/2021 – present
	Margaret Li, Ph.D. student, U Washington (co-advised w. Luke Zettlemoyer)	9/2020 – present
	Inna Lin, Ph.D. student (previously summer intern), U Washington	6/2020 – present
	Ashish Sharma, Ph.D. student, U Washington	9/2019 – present
	Mike Merrill, Ph.D. student, U Washington	9/2019 – present
	Galen Weld, Ph.D. student, U Washington	7/2019 – present
	Jina Suh, Ph.D. student, U Washington (co-advised with James Fogarty)	6/2019 – 12/2022
	Jacopo Mocellin, B.S. student, University of Trento (undergraduate intern)	9/2021 – 1/2022
	Ethan Hsu, M.S. student, Pennsylvania State University (intern)	7/2021 – 1/2022
	Melih Yilmaz, Ph.D. student, U Washington (Ph.D. rotation)	9/2020 – 1/2021
	Joy He-Yueya, B.S. student, U Washington (undergraduate research)	6/2019 – 12/2020
	CRA Outstanding Undergraduate Researcher Award	
	Ge Zhang, B.S. student, Peking University (undergraduate intern)	6/2019 – 9/2020
	Remy Deshayes, M.S. student, Ecole Polytechnique (summer intern)	6/2020 – 9/2020
	Peter West, Ph.D. student, U Washington (Ph.D. rotation)	6/2019 – 2/2020
	Prakhar Agarwal, M.S. student, U Washington (research assistant)	2/2019 – 6/2019
	Hamed Nilforoshan, B.S. student, Columbia University (undergraduate intern)	6/2017 – 6/2019
	Boris Ivanovic, M.S. student, Stanford University (research assistant)	9/2016 – 6/2019
	Chaitanya Asawa, B.S. student, Stanford University (senior project)	9/2016 – 4/2017
	Pranav Jindal, M.S. student, Stanford University (research assistant)	9/2015 – 6/2016
Teaching experience	Guest lecture, University of Washington *Computing for Social Good (CSE580)*	Spring 2023
	Guest lecture, U. Washington *Integrative Experience in Data Science (CSE491)*	Spring 2023
	Instructor, University of Washington *Machine Learning for Big Data (CSE547)*	Winter 2023
	Instructor, University of Washington *Data Science Capstone (CSE481DS)*	Fall 2022
	Guest lecture, U. Washington *Integrative Experience in Data Science (CSE491)*	Spring 2022
	Instructor, University of Washington *Machine Learning for Big Data (CSEP590)*	Spring 2022
	Instructor, University of Washington *Data Science Capstone (CSE481DS)*	Fall 2021
	Guest lecture, U. Washington *Integrative Experience in Data Science (CSE491)*	Spring 2021
	Guest lecture, University of Washington *Computing for Social Good (CSE580)*	Spring 2021
	Guest lecture, Stanford *Big Data Methods for Behavioral, Social and Population Health*	Spring 2021
	Co-Instructor, University of Washington *Natural Language Processing Seminar (NLP12)*	Spring 2021
	Instructor, University of Washington *Data Science Capstone (CSE481DS)*	Fall 2020
	Instructor, University of Washington *Machine Learning for Big Data (CSE547)*	Spring 2020
	Guest lecture, University of Washington *Computing for Social Good (CSE599)*	Spring 2020
	Co-Instructor, University of Washington *Big and Small Data in Health (CSE599H)*	Fall 2019
	Instructor, University of Washington *Machine Learning for Big Data (CSE547)*	Spring 2019

Guest lecture, University of Washington *Adv. Methods in Data Science (INFO371)*		Spring 2019
Instructor, University of Washington *Data Science for Human Well-being (CSE599H)*		Winter 2018
Guest lecture, Stanford: *From Languages to Information (CS124)*		3/2016 & 3/2017
Guest lecture, Recruit Holdings of Japan at Stanford		3/2017
Guest lecture, Friedrich-Alexander-Universität Erlangen-Nürnberg		12/2016
Guest lecture, Stanford: *Mining Massive Datasets (CS246)*		3/2016

Selected invited talks	Keynote, International Conference on Computational Social Science (IC2S2), Denmark	7/2023
	ICLR, Workshop on Time Series Representation Learning for Health	5/2023
	The Web Conference (WWW), Health Day, Austin, TX, USA	5/2023
	Texas A&M, Data Science Seminar, College Station, TX, USA	5/2023
	Northwestern University CBIT, IL, USA	4/2023
	AI Innovator Series, Pacific Northwest National Laboratory, WA, USA	3/2023
	NeurIPS Panel on NLP in Healthcare, 2022	12/2022
	Computer Science Department, U Michigan, Ann Arbor, MI, USA	11/2022
	Association for Behavioral and Cognitive Therapies, Annual Convention 2022	11/2022
	Halicioglu Data Science Institute, UC San Diego, CA, USA	10/2022
	EuroScience Open Forum, Leiden, Netherlands 2022	7/2022
	AI Keynote, LMU Munich, Germany 2022	5/2022
	National Academies of Sciences, Engineering, and Medicine	4/2022
	Keynote, Social NLP Workshop @ WebConf/WWW 2022	4/2022
	Computer Science Department, Cornell University, NY, USA	4/2022
	Computer Science Department, University of Michigan, Ann Arbor, MI, USA	4/2021
	NeurIPS Machine Learning for Mobile Health	12/2020
	Information Science Department, Cornell University, Ithaca, NY, USA	4/2020
	Digital Mental Health Workshop, San Francisco, WA, USA	1/2020
	The Human Factors and Ergonomics Society: Panel on Ubiquitous User Monitoring	10/2019
	Keynote at 2nd KDD Workshop on Offline and Online Evaluation of Interactive Systems	8/2019
	KDD Dissertation Award 2019	8/2019
	Data Abuse Prevention Workshop, DARPA/ISAT, Arlington, VA, USA	8/2018
	Schools of Computer Science and Information, University of Washington, Seattle, WA, USA	4/2018
	Computer Science Department, University of Southern California, Los Angeles, CA, USA	4/2018
	Computer Science Department, ETH Zurich, Zurich, CH	3/2018
	Boston Children's Hospital, Harvard Medical School, Boston, MA, USA	3/2018
	HCII, LTI, MLD, Carnegie Mellon University, Pittsburgh, PA, USA	3/2018
	Computer Science Department, Columbia University, New York City, NY, USA	3/2018
	Interactive Computing Department, Georgia Tech University, Atlanta, GA, USA	3/2018
	Computer Science Department, UC San Diego, San Diego, CA, USA	2/2018
	Computer Science Department, UC Los Angeles, Los Angeles, CA, USA	2/2018
	CSE Department, University of Michigan, Ann Arbor, MI, USA	2/2018
	Biomedical Data Science Department, Stanford University, Stanford, CA, USA	2/2018
	School of Public Health, UC Berkeley, Berkeley, CA, USA	1/2018
	Center for the Study of Language and Information (CSLI), Stanford University, CA, USA	6/2017
	Max Planck Institute for Software Systems, Saarbrücken, Germany	12/2016
	DFKI Deep Learning Competence Center, Kaiserslautern, Germany	12/2016
	Adidas, Herzogenaurach, Germany	12/2016
	Microsoft Health Intelligence Group, Redmond, WA, USA	6/2016
	Intelligent Systems Lab, University of Amsterdam, Netherlands	1/2013
	GI Informatiktage 2011, Bonn, Germany	3/2011

Selected community service	**Outstanding Reviewer Award** — *ACM Int'l Conference on Web-Search and Data Mining,* 2016
	Co-organizer
	Grand Challenges for Personal Informatics and AI, held at *CHI,* 2022
	WWW/WebConf, Co-Chair for *The Web of Health Special Track,* 2021
	Kavli Frontiers of Science, held at *National Academy of Sciences,* 2021

[WWW/WebConf,](#) Co-Chair for *Health on the Web Track,* 2020
[Kavli Frontiers of Science,](#) held at *National Academy of Sciences,* 2020
[Workshop on Machine Learning for Health,](#) held at *NeurIPS,* 2017
[Workshop on Observational Studies Through Social Media,](#) held at *ICWSM,* 2017

Advisory Panels
UNESCO, Fit For Life Global Associate Advisory Panel (GAAP), 2022
Centers for Disease Control and Prevention, Physical Activity Data Modernization Initiative, 2022

Editorial board member
Nature Scientific Data, 2018–present

(Senior) Program committee member
WWW — Intl. World Wide Web Conference, 2015–2020; Senior PC, 2021–2023
WSDM — ACM Intl. Conf. on Web Search and Data Mining, 2016–2018, Senior PC, 2020, 2023
KDD — ACM SIGKDD Conf. on Knowledge Discovery & Data Mining, 2015–2020, Senior PC, 2022
ICWSM — Intl. AAAI Conference on Web and Social Media, 2016–2018, Senior PC, 2021-2022
ACL — Annual Meeting of the Association for Computational Linguistics, Area Chair 2021
EMNLP — Intl. ACL Conference on Empirical Methods in Natural Language Processing, 2017–2018
MM — ACM Intl. Conference on Multimedia, 2014–2015
SocialNLP — Intl. Workshop on Natural Language Processing for Social Media, 2016–2017
EuroSymposium — European Symposium on Societal Challenges in Computational Social Science, 2017
HealthRecSys — Intl. Workshop on Health Recommender Systems at ACM RecSys, 2017

Journal reviewer
Nature — Nature, 2021
CellRM — Cell Reports Medicine, 2021, 2022
NatureHB — Nature Human Behavior, 2019
ScienceAdv — Science Advances, 2019
DS — EPJ Data Science, 2018
BMJ — British Medical Journal, 2019
S — Sleep, 2020
PR — Psychotherapy Research, 2020
JMIR — Journal of Medical Internet Research (incl. Mental Health, Serious Games), 2016–2018
MS — Management Science, 2018
TIST — ACM Transactions on Intelligent Systems and Technology, 2016
TKDE — IEEE Transactions on Knowledge and Data Engineering, 2016

Science outreach & selected media coverage (of 400+)

Selected articles in media

Nature Medicine on *Will ChatGPT transform healthcare?*	3/2023
The Washington Post on *We keep trying to make AI therapists. It's not working.*	2/2023
Psychology Today on *Are AI Chatbots the Therapists of the Future?*	1/2023
Cosmos on *Mental health support workers improve empathetic responses with help from AI*	1/2023
Psychology Today on *Can Human-AI Collaboration Enhance Empathy?*	11/2022
Medical News Today on *The connection between the food environment and healthy eating*	1/2022
Wall Street Journal on *Can Artificial Intelligence Replace Human Therapists?*	2/2021
Nature on *Studying the menstrual cycle in a male-dominated field*	2/2021
Stanford Human-Centered Artificial Intelligence on *Augmenting Psychotherapy with AI*	2/2021
GeekWire on *Pandemic data mining underscores the importance of social distancing [...]*	3/2020
GeekWire on *How data from smartphones [...] can inform us about human health [...]*	11/2019
The Globe and Mail on *Calls grow to redesign cities with women in mind*	4/2019
3M on *How creative science is helping make neighborhoods healthier*	10/2018
Nature Medicine on *Discovery cycle: Period-tracking apps offer new insights*	8/2018
New York Times on *A Crisis Line That Calms With Texting and Data*	12/2017
The Guardian on *'Paying to stay safe': why women don't walk as much as men*	10/2017
New York Times on *Jakarta, the City Where Nobody Wants to Walk*	8/2017
American Council on Science and Health on *Activity Inequality: What Does That Mean?*	8/2017
CNN on *Why are these countries the most obese? Walking is just one reason*	7/2017
The Washington Post on *Americans take fewer steps than people in U.K., new study reveals*	7/2017

CBS on *Daily step counts: Which countries are most active - and which are least?* 7/2017
TIME on *How Step Count Data Can Predict Obesity* 7/2017
WIRED on *The problem with fitness studies based on activity apps* 7/2017
Huffington Post on *How Smartphone Data Can Make Healthcare Smarter* 7/2017
NIH on *NIH-funded team uses smartphone data in global study of physical activity* 7/2017
Wall Street Journal on *Want to Exercise More? Try Screen Time* 12/2016
Forbes on *Study Finds Pokémon Go Does Get People Moving [...]* 12/2016
Science on *Pokémon Go could add extra years to your life* 10/2016
BBC on *Could playing Pokemon Go make you live longer?* 10/2016
CNN on *Pokemon Go could add 2.83 million years to users' lives* 10/2016
Reddit's front page on *Pokémon Go has added [...] 144 billion steps to US physical activity* 10/2016
The Economist on *Science on the web: Social net, working* 9/2014
Huffington Post on *Here's The Secret Formula for Getting Free Pizza, According to Science* 6/2014
ABC News on *How to Ask Strangers for a Free Pizza* 5/2014
MIT Technology Review on *Data Mining Reddit Posts Reveal How to Ask For a Favor* 5/2014

Selected video & radio interviews and coverage
OPB (radio) on *UW study looks at how AI can help people have more empathetic [...]* 2/2023
KUOW (radio) on *Can AI help increase expression of empathy?* 2/2023
Deutschlandfunk (radio) on *Automatische Empathie-Korrektur* 1/2023
Microsoft Accessibility on *University of Washington Empathy Project* 1/2023
Not Just Bikes (YouTube) on *I Don't Exercise (my city does that for me)* 5/2022
ABC News Australia (radio) on *Physical Activity Data Reveal Worldwide Activity Inequality* 7/2017
BBC (TV) on *Click (covering our research on NLP for crisis counseling and mental health)* 3/2017