Updated: 2/21/2024

## Johannes C. Eichstaedt

## **EDUCATION**

Ph.D.	Psychology, University of Pennsylvania, 2017 Clinical training in psychodiagnostic assessment & behavior therapy
M.A.	Psychology, University of Pennsylvania, 2013
M.A.P.P.	Applied Positive Psychology, University of Pennsylvania, 2011
M.S.	Physics, University of Chicago, 2010
B.S. (Hons.)	Physics & Philosophy, King's College London, 2009, <i>first-class honors</i> Jelf Medal (highest University distinction)
APPOINTMEN	TS
2020 –	Assistant Professor (Research), Psychology Shriram Faculty Fellow, Institute for Human-Centered Artificial Intelligence Stanford University
2018 – 2019	Senior Research Associate, World Well-Being Project Positive Psychology Center, University of Pennsylvania,
2017 – 2018	Postdoctoral Fellow, Department of Psychology, University of Pennsylvania
2011 – 2012	Lead Research Scientist/Co-Founder, World Well-Being Project Positive Psychology Center, University of Pennsylvania,
GRANTS	
2022 – 2024	NIDA R21 - Tracking the Opioid Epidemic with Social Media: an Early Warning System (Co-PI. Total: \$433,850, PI: Altman, Co-PIs: Kiang, Humphreys)
2021 – 2024	NIH R01 MH125702 - Smart and Connected Health: <i>Advancing Language-based Analyses of Social Media to Reliably Monitor Variation in Population Mental Health</i> (Co-PI, my part: \$371,879. Total: <b>\$1,122,862</b> . PI: Schwartz)

2021 – 2024	NIMH RF1 MH128785 - Telehealth 2.0: Evaluating effectiveness and engagement strategies for asynchronous texting-based trauma focused therapy for PTSD (Investigator, my part: \$60,000. Total: \$2,792,355. PI: Wiltsey Stirman)
2017 – 2018	Corporation for National and Community Service: Social Capital at the Community Level: A New Measure and Test of its Relationship with Economic and Health Outcomes (Subaward. \$50,000, PI: Paxton)
2014 – 2018	Templeton Religion Trust TRT0048: Funding for the World Well-Being Project (Investigator. Total: \$3,835,702, PI: Seligman, Co-PIs: Ungar, Schwartz)
Stanford Grants	
2023 – 2025	CBT-AI Companion: A Therapy Skill Training Application to Improve Mental Health Treatment (PI. \$200,000. Co-PI: Wiltsey-Stirman)
2023 – 2024	The Emotion Physiology and Experience Collaboration: Developing a Dataset to End the "Hundred-Year Emotion War" (PI. <b>\$49,550</b> , Co-PI: Coles)
2023 – 2024	Addicted by Design: An Investigation of How AI-fueled Digital Media Platforms Contribute to Addictive Consumption (PI. \$75,000, Co-PI: Lembke, Wald)
2023 – 2024	Leveraging Smartphone Data Collection to Improve Data Quality and Sample Generalizability in Epidemiologic Studies (Co-PI. \$75,000, PI: Kiang, Co-PI: Harari)
2020 – 2021	Building Culturally-Resonant AI to Fight Affective Propaganda (Co-PI. \$75,000, PI: Tsai)
2020 – 2023	Cloud Credit Grants Google Cloud Platform, 2023-2024: \$9,492; 2022-2023: \$65,040; 2021-2022: \$62,424
	Amazon Web Services, 2020-2021: \$68,000
Foreign Grants	
2023 – 2024	UK Medical Research Council: <i>Develop and evaluate innovative methods to study adolescent health</i> (Advisor. Total: £173,717, PI: Orben)
FELLOWSHIPS	
2012 – 2017	Benjamin Franklin Fellowship, University of Pennsylvania (\$300,000)

2012 - 2014	Marshall Fund Fellowship, German National Academic Foundation (\$90,000)
2009 - 2010	Scholarship to Study Experimental Physics, University of Chicago (\$25,000)

## **AWARDS & HONORS**

2023	John Philip Coghlan Fellow in the Humanities, Stanford University
2022	Rising Star, Association for Psychological Science
2021	Early Career Researcher Award, International Positive Psychology Association
2016	Scientist of the Year, Philadelphia Geek Awards
2015	Dean's Scholar, University of Pennsylvania
2014	Emerging Leader in Science & Society, American Association for the Advancement of Science (AAAS)
2009	Elected as Associate of King's College, London

#### RESEARCH INTERESTS

<u>Methods:</u> Natural Language Processing & Large Language Models; data science and visualization; longitudinal methods, machine learning, and psychological assessment through AI

<u>Mental and physical health:</u> depression, stress, and anxiety; health psychology: heart disease and opioid addiction

<u>Well-being:</u> affect, life satisfaction, and purpose, and their individual and societal determinants (lifestyle factors and policies); traits: character strengths, personality, trust, and empathy

### **JOURNAL PUBLICATIONS**

H-index: 37, citations > 9,500 | see jeichstaedt.com/pubs for overview | senior author underlined

- J53. Nilsson, A.H., **Eichstaedt, J. C.**, Lomas, T. & Kjell, O. (2024) The Cantril Ladder elicits thoughts about power and wealth. Sci Rep 14, 2642. [pdf]
- J52. Demszky, D., Yang, D., Yeager, D. S., Bryan, C. J., Clapper, M., Chandhok, S., **Eichstaedt, J. C.** ... & Pennebaker, J. W. (2023). Using large language models in psychology. *Nature Reviews Psychology*, 1-14. [pdf]

- J51. Giorgi, S., **Eichstaedt, J. C.**, Preotiuc-Pietro, D., Gardner, J. R., Schwartz, H. A., Ungar, L. H. (**2023**, in print) Filling in the White Space: Spatial Interpolation with Gaussian Processes and Social Media Data. *Current Research in Ecological and Social Psychology*
- J50. Stade, E. C., Stirman, S. W., Ungar, L. H., Schwartz, H. A., Yaden, D. B., Sedoc, J., ... <u>Eichstaedt, J. C.</u> (2023, in revision). Artificial intelligence will change the future of psychotherapy: A proposal for responsible, psychologist-led development. <a href="https://doi.org/10.31234/osf.io/cuzvr">https://doi.org/10.31234/osf.io/cuzvr</a> [pdf]
- J49. Kjell, O., Giorgi, S., Schwartz, H. A. & <u>Eichstaedt, J.C.</u> (2023) Towards Well-Being Measurement with Social Media Across Space, Time and Cultures: Three Generations of Progress. In *2023 World Happiness Report*, Chapter 5. [pdf]
- J48. Yaden, D. B., Giorgi, S., Jordan, M., Buffone, A., **Eichstaedt, J. C.,** Schwartz, H. A., Ungar, L. H. & Bloom, P. (2023). Characterizing empathy and compassion using computational linguistic analysis. *Emotion*. [pdf]
- J47. Giorgi, S., Yaden, D. B., **Eichstaedt, J. C.**, Ungar, L. H., Schwartz, H. A., Kwarteng, A., & Curtis, B. (2023). Predicting US county opioid poisoning mortality from multi-modal social media and psychological self-report data. *Scientific reports*, *13*(1), 9027.
- J46. Bai, H., Voelkel, J. G., **Eichstaedt, J. C.**, & Willer, R. (2023, February 5). Artificial Intelligence Can Persuade Humans on Political Issues. *PsyArxiv preprint* <a href="https://doi.org/10.31219/osf.io/stakv">https://doi.org/10.31219/osf.io/stakv</a> [pdf]
- J45. Mangalik, S., Eichstaedt, J. C., Giorgi, S., Mun, J., Ahmed, F., Gill, G., ... & Schwartz, H. A. (2023). Robust language-based mental health assessments in time and space through social media. *NJP Digital Medicine*. [pdf]
- J44. Lou, S., Giorgi, Sl. Liu, T., **Eichstaedt, J. C.** & Curtis, B. (2023). Measuring disadvantage: A systematic comparison of United States small-area disadvantage indices. *Health & Place*, Vol 80, 102997. [pdf]
- J43. Wilhelm, E., Ballalai, I., (...), **Eichstaedt J. C.**, (...), Purnat, T. D. (2023) Measuring the Burden of Infodemics: Summary of the Methods and Results of the Fifth WHO Infodemic Management Conference. *JMIR Infodemiology* 2023;3:e44207 doi: 10.2196/44207 [pdf]
- J42. Levanti. D., Monastero, R. N., Zamani, M., **Eichstaedt, J. C.**, Giorgi, S., Schwartz, H. A., & Meliker, J.R., (2022). Depression and anxiety on Twitter during the COVID-19 stay-athome period in seven major US cities, *AJPM Focus*, doi: <a href="https://doi.org/10.1016/j.focus.2022.100062">https://doi.org/10.1016/j.focus.2022.100062</a> [pdf]
- J41. Liu, T., Ungar, L. H., Curtis, B., Sherman, G., Yadeta, K., Tay, L., **Eichstaedt, J. C. &** Guntuku, S. C. (2022). Head versus heart: social media reveals differential language of loneliness from depression. *npj Mental Health Research*, 1(1), 1-8. [pdf]

- J40. Sametoğlu, S., Pelt, D. H., **Eichstaedt, J. C.**, Ungar, L. H., & Bartels, M. (2023). Comparison of wellbeing structures based on survey responses and social media language: A network analysis. *Applied Psychology: Health and Well-Being*, 1-28. [pdf]
- J39. Sametoğlu, S., Pelt, D. H. M., **Eichstaedt, J. C.**, Ungar, L. H., & Bartels, M. (2023). The value of social media language for the assessment of wellbeing: a systematic review and meta-analysis. *The Journal of Positive Psychology*, 1-19. [pdf]
- J38. Frimer, J. A., Aujla, H., Feinberg, M., Skitka, L. J., Aquino, K., **Eichstaedt, J. C.**, & Willer, R. (2022). Incivility is rising among American politicians on Twitter. *Social Psychological and Personality Science*, 19485506221083811. [pdf]
- J37. Liu, T., Meyerhoff, J., **Eichstaedt, J. C.**, Karr, C. J., Kaiser, S. M., Kording, K. P., ... & Ungar, L. H. (2021). The relationship between text message sentiment and self-reported depression. *Journal of Affective Disorders*. [pdf]
- J36. Eichstaedt, J. C., Sherman, G. T., Giorgi, S., Roberts, S. O., Reynolds, M. E., Ungar, L. H., & Guntuku, S. C. (2021). The emotional and mental health impact of the murder of George Floyd on the US population. *Proceedings of the National Academy of Sciences*, 118(39), e2109139118. [pdf]
- J35. **Eichstaedt, J. C.**, Kern, M. L., Yaden, D. B., Schwartz, H. A., Giorgi, S., Park, G., Hagan, C.A., Tobolsky, V., Smith, L. K., Buffone, A., Iwry, J., Seligman, M. E. P., & Ungar, L. H.; (2021). Closed and Open Vocabulary Approaches to Text Analysis: A Review, Quantitative Comparison, and Recommendations. *Psychological Methods*, *26(4)*, *398*. [pdf]
- J34. Giorgi, S., Nguyen, K. L., **Eichstaedt, J. C.,** Kern, M. L., Yaden, D. B., Kosinski, M., Seligman, M. E. P., Ungar, L. H., Schwartz, H. A. & Park, G. (2021). Regional personality assessment through social media language. *Journal of Personality*. [pdf]
- J33. Ressler, R. W., Paxton, P., Velasco, K., Pivnick, L., Weiss, I., & <u>Eichstaedt, J. C.</u> (2021). Nonprofits: A public policy tool for the promotion of community subjective well-being. *Journal of Public Administration Research and Theory*, 31(4), 822-838. [pdf]
- J32. Jaidka, K., **Eichstaedt, J. C.**, Giorgi, S., Schwartz, H. A., Efron, N., & Ungar, L. H. (2020). Information-seeking vs. sharing: Which explains regional health? An analysis of Google Search and Twitter trends. *Telematics and Informatics*, 101540. [pdf]
- J31. Ward, G., De Neve, J.-E., Ungar, L. H., & <u>Eichstaedt, J. C.</u> (2020). (Un)Happiness and Voting in U.S. Presidential Elections. *Journal of Personality and Social Psychology*. [pdf]
- J30. Jaidka, K., Giorgi, S., Schwartz, H. A., Kern, M. L., Ungar, L. H., & <u>Eichstaedt, J. C.</u> (2020). Estimating geographic subjective well-being from Twitter: A comparison of dictionary and data-driven language methods. *Proceedings of the National Academy of Sciences*, 117(19), 10165-10171. [pdf]

- J29. Son, Y., Clouston, S., Kotov, R., **Eichstaedt, J. C.**, Bromet, E. J., Luft, B. J., & Schwartz, H. A. (2021). World Trade Center responders in their own words: predicting PTSD symptom trajectories with AI-based language analyses of interviews. *Psychological Medicine*, 1–9. [pdf]
- J28. Yaden, D. B., Giorgi, S., Kern, M. L., Adler, A., Ungar, L. H., Seligman, M. E. P., & <u>Eichstaedt, J. C.</u> (2020). Beyond beliefs: Multidimensional Aspects of Religion and Spirituality in Language. *Psychology of Religion and Spirituality*. [pdf]
- J27. Eichstaedt, J. C., Yaden, D. B., Ribeiro, F., Adler, A., & Kern, M. L. (2020). Lifestyle and wellbeing: Exploring behavioral and demographic covariates in a large US sample. *International Journal of Wellbeing*, 10 (4), 87 112. [pdf]
- J26. **Eichstaedt, J. C.** & Weidman, A. (2020) Tracking Fluctuations in Psychological States: A Case Study of Weekly Emotion Using Social Media Language. *European Journal of Personality*. [pdf]
- J25. Giorgi, S., Yaden, D. B., **Eichstaedt, J. C.**, Ashford, R. D., Buffone, A. E., Schwartz, H. A., Ungar, L. H., Curtis, B. (2020) Cultural Differences in Tweeting about Drinking Across the US. *International Journal of Environmental Research and Public Health.* 17, 1125. [pdf]
- J24. Ahmed, S., Cho, J., Jaidka, K., **Eichstaedt, J. C.**, & Ungar, L. H. (2020). The Internet and Participation Inequality: A Multilevel Examination of 108 Countries. *International Journal of Communication*, 14, 22. [pdf]
- J23. Yaden, M. E., Yaden, D. B., Buffone, A. E. K., **Eichstaedt, J. C.**, Crutchley, P., Smith, L., Cass, J. L., Callahan, C. A., Rosenthal, S., R., Ungar, L. H., Schwartz, H. A., Hojat, M. (2020) Linguistic Analysis of Empathy in Medical School Admission Essays. *International Journal of Medical Education*. [pdf]
- J22. Pang, D., Eichstaedt, J. C., Buffone, A., Slaff, B., Ruch, W., & Ungar, L. H. (2019). The Language of Character Strengths: Predicting Morally Valued Traits on Social Media. *Journal of Personality*, 88(2), 287-306. [pdf]
- J21. Merchant, R. M., Asch, D. A., Crutchley, P., Ungar, L. H., Guntuku, S., **Eichstaedt, J. C.** Hill, S., Padrez, K., Smith, R. J., & Schwartz, H. A. (2019). Evaluating the predictability of medical conditions from social media posts. *PLoS One*, 14(6), e0215476. [pdf]
- J20. Otto, A. R., & Eichstaedt, J. C. (2018). Real-world unexpected outcomes predict city-level mood states and risk-taking behavior. *PLoS One*, 13(11), e0206923. [pdf]
- J19. Yaden, D. B., **Eichstaedt, J. C.**, & Medaglia, J. D. (2018). The Future of Technology in Positive Psychology: Methodological Advances in the Science of Well-Being. *Frontiers in Psychology*, 9, 962. [pdf]
- J18. Eichstaedt, J. C. <sup>1</sup>, Smith, R. J. <sup>1</sup>, Merchant, R. M., Ungar, L. H., Crutchley, P., Preotiuc-Pietro, D., Asch, D. A., & Schwartz, H. A. (2018) Facebook Language Predicts Depression

- as Recorded in Medical Records. *Proceedings of the National Academy of Sciences, 115* (44) 11203-11208. [pdf]. (¹Equal contribution.)
- J17. Obschonka, M., Lee, N., Rodríguez-Pose, A., Eichstaedt, J. C., & Ebert, T. (2018). Big Data, artificial intelligence and the geography of entrepreneurship in the United States. *Centre for Economic Policy Research (No. 12949)*. [pdf]
- J16. **Eichstaedt, J. C.**, Schwartz, H. A., Giorgi, S., Kern, M. L., Park, G., Sap, M., Labarthe D.R., Larson, E. E., Seligman, M. E, P., & Ungar, L. H. (2018, March 15). More Evidence that Twitter Language Predicts Heart Disease: A Response and Replication. *PsyArXiv*. https://doi.org/10.31234/osf.io/p75ku [pdf]
- J15. Yaden, D. B., **Eichstaedt, J. C.**, Kern, M. L., Smith, L. K., Buffone, A., Stillwell, D. J., Kosinski, M., Ungar, L.H., Seligman, M.E. & Schwartz, H. A. (2017). The Language of Religious Affiliation: Social, Emotional, and Cognitive Differences. *Social Psychological and Personality Science*, 9(4), 444-452. [pdf]
- J14. Guntuku, S. C., Yaden, D. B., Kern, M. L., Ungar, L. H., & <u>Eichstaedt, J. C.</u> (2017). Detecting depression and mental illness on social media: an integrative review. *Current Opinion in Behavioral Sciences*, 18, 43-49. [pdf]
- J13. Yaden, D. B., Le Nguyen, K. D., Kern, M. L., Wintering, N. A., **Eichstaedt, J. C.**, Schwartz, H. A., Buffone, A.E., Smith, L.K., Waldman, M.R., Hood Jr, R.W., & Newberg, A. B. (2017). The noetic quality: A multimethod exploratory study. *Psychology of Consciousness: Theory, Research, and Practice*, 4(1), 54. [pdf]
- J12. Yaden, D. B., Le Nguyen, K. D., Kern, M. L., Belser, A. B., **Eichstaedt, J. C.**, Iwry, J., Smith, M. E., Wintering, N. A., Hood, R. W., & Newberg, A. B. (2016). Of Roots and Fruits A Comparison of Psychedelic and Nonpsychedelic Mystical Experiences. *Journal of Humanistic Psychology*, 57(4), 338-353. [pdf]
- J11. Yaden, D. B., Iwry, J., Slack, K. J., **Eichstaedt, J. C.**, Zhao, Y., Vaillant, G. E., & Newberg, A. B. (2016). The overview effect: Awe and self-transcendent experience in space flight. *Psychology of Consciousness: Theory, Research, and Practice*, 3(1), 1. [pdf]
- J10. Kern, M. L., Park, G., **Eichstaedt, J. C.**, Schwartz, H. A., Sap, M., Smith, L. K., & Ungar, L. H. (2016). Gaining Insights From Social Media Language: Methodologies and Challenges. *Psychological Methods*, 21(4), 507. [pdf]
- J9. Park, G., Yaden, D. B., Schwartz, H. A., Kern, M. L., **Eichstaedt, J. C.**, Kosinski, M., ... & Seligman, M. E. (2016). Women are Warmer but No Less Assertive than Men: Gender and Language on Facebook. *PloS ONE*, 11(5), e0155885. [pdf]
- J8. Park, G., Schwartz, H. A., Sap, M., Kern, M. L., Weingarten, E., **Eichstaedt, J. C.**, Berger, J., Stillwell, D. J., Kosinski, M., Ungar, L. H. & Seligman, M. E. (2015). Living in the Past, Present, and Future: Measuring Temporal Orientation with Language. *Journal of Personality*, 85(2), 270-280. [pdf]

- J7. Yaden, D. B., Eichstaedt, J. C., Schwartz, H. A., Kern, M. L., Le Nguyen, K., Wintering, N. A., Hood, R. W., Newberg, A. B. (2015). *The language of ineffability: Linguistic analysis of mystical experiences. Journal of Religion and Spirituality*, 8(3), 244. [pdf]
- J6. Duckworth, A. L., Eichstaedt, J. C., & Ungar, L. H. (2015), The Mechanics of Human Achievement. *Social and Personality Psychology Compass*, 9, 359–369. [pdf]
- J5. **Eichstaedt, J. C.**, Schwartz, H. A., Kern, M. L., Park, G., Labarthe, D. R., Merchant, R. M., Jha, S., Agrawal, M., Dziurzynski, L. A., Sap, M., Weeg, C., Larson, E. E., Ungar, L. H., & Seligman, M. E. (2015) Psychological Language on Twitter Predicts County-Level Heart Disease Mortality. *Psychological Science*. 26(2), 159-169. [pdf]
- J4. Park, G., Schwartz, H. A., **Eichstaedt, J. C.**, Kern, M. L., Kosinski, M., Stillwell, D. J., Ungar, L. H., & Seligman, M. E. P. (2014). Automatic personality assessment through social media language. *Journal of Personality and Social Psychology*, 108(6), 934. [pdf]
- J3. Kern, M. L., **Eichstaedt, J. C.**, Schwartz, H. A., Dziurzynski, L., Ungar, L. H., Stillwell, D. J., Kosinski, M., Ramones, S. M., & Seligman, M. E. P. (2014). The online social self: An open vocabulary approach to personality. *Assessment*, 21, 158-169. [pdf]
- J2. Kern, M. L., **Eichstaedt, J. C.**, Schwartz, H. A., Park, G., Ungar, L. H., Stillwell, D. J., Kosinski, M., Dziurzynski, L., & Seligman, M. E. P. (2014). From "sooo excited!!!" to "so proud": Using language to study development. *Developmental Psychology*, 50, 178-188. [pdf]
- J1. Schwartz, H. A., Eichstaedt, J. C., Kern, M. L., Dziurzynski, L., Ramones, S. M., Agrawal, M., Shah, A., Kosinki, M., Stillwell, D., Seligman, M. E. P., & Ungar, L. H. (2013). Personality, gender, and age in the language of social media: The open-vocabulary approach. *PloS ONE*, 8(9), e73791. [pdf]

### **CONFERENCE PUBLICATIONS**

Note: In the field of AI-Natural Language Processing, peer-reviewed conferences are the most reputable and prestigious venues, with the lowest acceptance rates and highest impact factors.

- C24. Juhng, S., Matero, M., Varadarajan, V., **Eichstaedt, J. C.,** Ganesan, A. V., & Schwartz, H. A. (2023, July). Discourse-Level Representations can Improve Prediction of Degree of Anxiety. In *Proceedings of the 61st Annual Meeting of the Association for Computational Linguistics* (*ACL*) (pp. 1500-1511). [pdf]
- C23. Liu, T., Jain, D., Rapole, S. R., Curtis, B., **Eichstaedt, J. C.**, Ungar, L. H. & Guntuku, S. C. (2023). Detecting Symptoms of Depression on Reddit. *WebSci 2023* (April 2023) [pdf]
- C22. Omitaomu, D., Tafreshi, S., Liu, T., Buechel, S., Callison-Burch, C., **Eichstaedt, J.C.**, ... & Sedoc, J. (2022). Empathic Conversations: A Multi-level Dataset of Contextualized Conversations. *arXiv preprint* arXiv:2205.12698. [pdf]

- C21. Ganesan, A. V., Varadarajan, V., Mittal, J., Subrahmanya, S., Matero, M., Soni, N., Guntunku S. C., **Eichstaedt, J. C.**, & Schwartz, H. A. (2022, July). WWBP-SQT-lite: Multilevel Models and Difference Embeddings for Moments of Change Identification in Mental Health Forums. In Proceedings of the *Eighth Workshop on Computational Linguistics and Clinical Psychology* (pp. 251-258). [pdf]
- C20. van Loon, A., Giorgi, S., Willer, R., & <u>Eichstaedt, J. C.</u> (2022, May). Negative Associations in Word Embeddings Predict Anti-black Bias across Regions—but Only via Name Frequency. In Proceedings of the *International AAAI Conference on Web and Social Media (ICWSM)* (Vol. 16, pp. 1419-1424). [pdf]
- C19. Giorgi, S., G. Guntuku, S. C., **Eichstaedt, J. C.,** Pajot, C., Schwartz, A. H., & Ungar, L. H. (2021) "Well-Being Depends on Social Comparison: Hierarchical Models of Twitter Language Suggest That Richer Neighbors Make You Less Happy." *International AAAI Conference on Weblogs and Social Media (ICWSM)*. [pdf]
- C18. van Loon, A., Stewart, S., Waldon, B., Lakshmikanth, S. K., Shah, I., Zou, J., & <u>Eichstaedt, J. C.</u> (2020). Explaining the 'Trump Gap' in Social Distancing Using COVID discourse. In proceedings of *EMNLP 2020 (Empirical Methods in NLP) Workshop on COVID-19*. [pdf]
- C17. Santosh, R., Schwartz, H. A., **Eichstaedt, J. C.**, Ungar, L., & Guntuku, S. C. (2020) Detecting Emerging Symptoms of COVID-19 using Context-based Twitter Embeddings. In proceedings of *EMNLP 2020 (Empirical Methods in NLP) workshop on COVID-19*. [pdf]
- C16. Zamani, M., Schwartz, H. A., **Eichstaedt, J. C.,** Guntuku, S. C., Ganesan, A. V., Clouston, S., & Giorgi, S. (2020, November). Understanding Weekly COVID-19 Concerns through Dynamic Content-Specific LDA Topic Modeling. In Proceedings of the Fourth Workshop on *Natural Language Processing and Computational Social Science* (pp. 193-198). [pdf]
- C15. Guntuku, S. C., Buffone, A., Jaidka, K., Eichstaedt, J.C., & Ungar, L. (2019). Understanding and Measuring Psychological Stress using Social Media. In *AAAI Conference on Web and Social Media (ICWSM)*. [pdf]
- C14. Guntuku, S. C., Preoţiuc-Pietro, D., **Eichstaedt, J. C.** & Ungar, L. H. (2019). What Twitter Profile and Posted Images Reveal about Depression and Anxiety. In *AAAI Conference on Web and Social Media (ICWSM)*. [pdf]
- C13. Jaidka, K., Buffone, A., Giorgi, S., **Eichstaedt, J. C.**, Rouhizadeh, M., & Ungar, L. H. (2018). Modeling and visualizing locus of control with Facebook language. In *International AAAI Conference on Web and Social Media (ICWSM)*. [pdf]
- C12. Schwartz, H. A., Giorgi, S., Sap, M., Crutchley, P., Ungar, L., & Eichstaedt, J. C. (2017). DLATK: Differential language analysis ToolKit. In *Conference on Empirical Methods in Natural Language Processing (EMNLP)*: System Demonstrations (pp. 55-60). [pdf]

- C11. Abdul-Mageed, M., Buffone, A., Peng, H., Eichstaedt, J. C., & Ungar, L. H. (2017). Recognizing Pathogenic Empathy in Social Media. In *International AAAI Conference on Web and Social Media (ICWSM)*. [pdf]
- C10. Smith, L.K., Giorgi, S., Solanki, R., **Eichstaedt, J. C.**, Schwartz, A. H., Abdul-Mageed, M., Buffone, A., & Ungar, L. H. (2016). Does 'well-being translate on Twitter?' In *Empirical Methods in Natural Language Processing (EMNLP)*. [pdf]
- C9. Preotiuc-Pietro, D., Schwartz, H.A., Park, G., **Eichstaedt, J. C.**, Kern, M., Ungar, L., Shulman, E.P. (2016). Modelling Valence and Arousal in Facebook Posts. In the *Workshop on Computational Approaches to Subjectivity, Sentiment and Social Media Analysis (WASSA)*, in North American Chapter of the Association for Computational Linguistics (NAACL). [pdf]
- C8. Schwartz, H. A., Sap, M., Kern, M. L., **Eichstaedt, J. C.**, Kapelner, A., Agrawal, M., Blanco, E., Dziurzynski, L., Park, G., Stillwell, D., Kosinski, D., Seligman, M.E.P., Ungar, L.H. (2016). Predicting Individual Well-Being Through the Language of Social Media. In *Pacific Symposium on Biocomputing* 21:516-527. [pdf]
- C7. Schwartz, A. H., Park, G., Sap, M., Weingarten, E., **Eichstaedt, J.C.**, Kern, M., Stillwell, D., Kosinski, M., Berger, J., Seligman, M., & Ungar, L. (2015). Extracting Human Temporal Orientation from Facebook Language. In *North American Chapter of the Association for Computational Linguistics (NAACL)*. [pdf]
- C6. Preotiuc-Pietro, D., Eichstaedt, J.C., Park, G., Sap, M., Smith, L., Tobolsky, V., Schwartz, H. A., & Ungar, L. H. (2015). The Role of Personality, Age and Gender in Tweeting about Mental Illnesses. In *Workshop on Computational Linguistics and Clinical Psychology (CLPsych): From Linguistic Signal to Clinical Reality*, in North American Chapter of the Association for Computational Linguistics (NAACL). [pdf]
- C5. Sap, M., Park, G., **Eichstaedt, J. C.**, Kern, M. L., Stillwell, D. J., Kosinski, M., Ungar, L. H., & Schwartz, H. A. (2014). Developing age and gender predictive lexica over social media. In *Conference on Empirical Methods in Natural Language Processing (EMLNP)*. [pdf]
- C4. Schwartz, H. A., **Eichstaedt, J. C.**, Kern, M. L., Park, G., Sap, M., Stillwell, D., Kosinski, M., Ungar, L. H. (2014). Towards Assessing Changes in Degree of Depression through Facebook. In *Workshop on Computational Linguistics and Clinical Psychology (CLPsych)*, 118, in North American Chapter of the Association for Computational Linguistics (NAACL). [pdf]
- C3. Schwartz, H. A.<sup>1</sup>, Eichstaedt, J. C.<sup>1</sup>, Kern, M. L., Dziurzynski, L., Lucas, R. E., Agrawal, M., Park, G. J., Lakshmikanth, S. K., Jha, S., Seligman, M. E. P., & Ungar, L. H. (2013). Characterizing Geographic Variation in Well-Being using Tweets. In Seventh *International AAAI Conference on Weblogs and Social Media (ICWSM)*. [pdf]. (<sup>1</sup>Equal contribution.)

- C2. Schwartz, H. A., **Eichstaedt, J. C.**, Dziurzynski, L., Kern, M. L., Blanco, E., Kosinski, M., Stillwell, D., Seligman, M. E. P., & Ungar, L. H. (2013). Toward Personality Insights from Language Exploration in Social Media. *In AAAI Spring Symposium Series*. [pdf]
- C1. Schwartz, H. A., **Eichstaedt, J. C.**, Dziurzynski, L., Kern, M. L., Blanco, E., Ramones, S., Seligman, M. E. P., & Ungar, L. H. (2013). Choosing the Right Words: Characterizing and Reducing Error of the Word Count Approach. *In \*SEM-2013: Second Joint Conference on Lexical and Computational Semantics*. [pdf]

## Other Publications

**Eichstaedt, J. C.** (2021) AI-Enabled Depression Prediction Using Social Media. *Policy Brief Series, Institute for Human-Centered AI, Stanford, CA.* 

**Eichstaedt, J.C.** (2016). Using Social Media to Assess Health from Afar. *Scientific American Mind*, 27(2): 62-67.

**Eichstaedt, J. C.** (2015). Big Data and the World of Social Media: Lessons Learned at the Intersection of Computer and Psychological Sciences. *APS Observer*.

## INVITED NGO POLICY ENGAGEMENTS

**Eichstaedt, J. C.** (2021, November). Expert panel on the spread of COVID misinformation. 5<sup>th</sup> Infodemic Management Conference, World Health Organization (WHO), Online.

**Eichstaedt, J. C.** (2016, July). *Big Data Psychology*. NOVUS Innovation Summit, United Nations General Assembly (UN GA), New York, NY.

**Eichstaedt, J. C.** (2016, February). *Measuring the Health and Well-Being of Populations Through Social Media*. 3<sup>rd</sup> Annual Power of Collaboration Global Summit, Economic and Social Council (UN ECOSOC), New York, NY.

**Eichstaedt, J. C.** (2015, October). *The Promise of Big Data from Social Media to Measure the Well-Being of Populations*. 5<sup>th</sup> OECD World Forum on Statistics, Knowledge and Policy, Organisation for Economic Co-operation and Development (OECD), Guadalajara, Mexico.

### **INVITED TALKS**

**Eichstaedt, J. C.** (November, 2023) *Beyond Engineering: Understanding the LLM Transformation of Society Requires the Social Sciences.* Psychology of Technology Conference (Los Angeles, CA).

**Eichstaedt, J. C.** (September, 2023). PRISM Health Symposium. *Panel on How Generative AI Influences Health Communication and Research.* 

- **Eichstaedt, J. C.** (September, 2023). Trust & Safety Conference, *Panel on AI in Mental Health*. Stanford University, CA, USA.
- **Eichstaedt, J. C.** (September, 2023). *The use of Large Language Models and Big Data in Psychology*. University of Pennsylvania, Philadelphia, PA.
- **Eichstaedt, J. C.** (May, 2023). *Measuring Mental and Physical Health using Social Media (and LLMs in Psychology)*. Duck Conference on Social Cognition, North Carolina.
- **Eichstaedt, J. C.** (May, 2023). *Big Data Psychology and the Coming Age of Large Language Models*. Johns Hopkins University, Baltimore, Maryland
- **Eichstaedt, J. C.** (May, 2023). *LLM Risks and Societal Impacts*. Institute for Assured Autonomy, Johns Hopkins University, Baltimore, Maryland.
- **Eichstaedt, J. C.** (March, 2023). *Measuring Mental and Physical Health Using Social Media and Digital Text*. Berkeley University, CA, USA.
- **Eichstaedt, J. C.** (2022, December). *Methodological, Philosophical and Ethical Issues Around Well-Being Measurement Through Big Data.* National Yang Ming Chiao Tung University, Taiwan.
- **Eichstaedt, J. C.** (2022, July). The Current State of the Art in the Population Measurement of Well-being Through Twitter. Wellbeing Research & Policy Conference, Oxford, UK.
- **Eichstaedt, J. C.** (2022, July). The State of the Art in the Measurement of Populations from Social Media. Keynote. Regional Cultural Differences Conference, Barcelona, Spain.
- **Eichstaedt, J. C.** (2022, February). *Oh no, we Built a Sad Robot! Building Artificial Intelligence equipped with Personality or Depression*. Psychology of Media and Technology, SPSP preconference, San Francisco, CA.
- **Eichstaedt, J. C.** (2021, October). *The Future of Positive Psychology*. International Positive Psychology Association World Congress, Online.
- **Eichstaedt, J. C.** (2021, April). *Big Data Psychology*. Machine Learning Day, Arizona State University, Phoenix, AZ.
- **Eichstaedt, J. C.** (2020, August). *The Psychological Toll of COVID-19*. Keynote. American Psychological Association Conference 2020, Online.
- **Eichstaedt, J. C.** (2020, June). *Introduction to Text Analysis in the Social Sciences*. Bay Area Summer Institute in Computational Social Science, Online.

- **Eichstaedt, J. C.** (2020, May). AI and COVID-19. Global Forum on Innovation in Health Professional Education, The National Academies of Sciences, Engineering, and Medicine, Online.
- **Eichstaedt, J. C.** (2020, April). *Using Large Social Data for COVID-19*. Open Data Science Conference, Online.
- **Eichstaedt, J. C.** (2020, April). *Using Twitter to Understand the Impact of COVID-19*. Stanford Symposium on COVID and A.I., Stanford University, Stanford, CA.
- **Eichstaedt, J. C.** (2019, July). *Detecting Depression, Understanding Well-Being and Predicting Elections with Social Media* World Congress on Positive Psychology, International Positive Psychology Association, Melbourne, Australia.
- **Eichstaedt, J. C.** (2018, October). The Science of Happiness symposium. National Geographic, Washington, DC.
- **Eichstaedt, J. C.** (2017, July). *Measuring Well-Being through Big Data*. Founders Symposium. Fifth World Congress on Positive Psychology, International Positive Psychology Association, Montreal, Canada.
- **Eichstaedt, J. C.** (2017, March) *Big Data Psychology: Measuring Health and Well-Being through Social Media.* Knowledge & Human Development Authority, Dubai, UAE.
- **Eichstaedt, J.C.** (2016, February). *Measuring Psychological States Through Social Media*. The Presidential Symposium 17<sup>th</sup> Annual Convention, Society of Personality and Social Psychology, San Diego, CA.
- **Eichstaedt, J. C.** (2016, February). Calibrating Social Media Measurement to Augment Official Datasets. Instituto Nacional de Estadistica y Geografia (INEGI), Aguascalientes, Mexico.
- **Eichstaedt, J. C.** (2016, February). *Temporal Mental Health Analysis in Social* Media. Workshop on the Use of Social Media in the Assessment of Mental Health in Adolescent Populations, Instituto Nacional de Estadistica y Geografia (INEGI), Aguascalientes, Mexico.
- **Eichstaedt, J. C.** (2016, February). *Using Twitter and Facebook to measure the health and wellbeing of large populations.* Inter-American Development Bank (IDB), Washington, DC.
- **Eichstaedt, J. C.** (2015, September). *Behaving digitally*. International Behavioural Insights Conference 2015, London, England.
- **Eichstaedt, J. C.** (2015, June). *Measuring Psychological States Through Social Media*. Alfred Krupp Institute for Advanced Studies, Greifswald, Germany.
- Schwartz, H. A., **Eichstaedt, J. C.** (2014, June). Generación de información estadística, a partir de datos disponibles en la web: Usando Big Data para medir el Bienestar Subjetivo. Sessions on Big Data, Instituto Nacional de Estadística y Geografía (INEGI), Mexico City, Mexico.

**Eichstaedt, J.C.** (2014, April). *Measuring the Collective Mind through Facebook*. West Philadelphia Science Showcase, Philadelphia Science Festival, Philadelphia, PA.

**Eichstaedt, J.C.** (2014, February). *Measuring the Well-Being of Entire Nations Through Social Media*. Wellbeing Sessions, South Australian Health and Medical Research Institute (SAHMRI), Adelaide, South Australia.

### **CONFERENCE PARTICIPATION**

## Symposia Organized

**Eichstaedt, J. C.** (2017, July). *Big Data Insights about Character Strengths, Empathy, and Physical Health.* Symposium held at the Fifth World Congress on Positive Psychology, International Positive Psychology Association, Montreal, Canada

Kosinski, M., **Eichstaedt, J. C.** (2016, May) *Psychology for Computer Scientists: Fundamental Orientation and Frameworks*. Workshop organized in International AAAI Conference on Weblogs and Social Media (ICWSM), Cologne, Germany.

**Eichstaedt, J. C.** (2015, March). My N is Ten Million: Using Social media to Track Emotion, Mental Health, and Measure Personality Across Entire Populations. Symposium held at the International Convention of Psychological Science (ICPS), Amsterdam, Netherlands.

## **Papers Presented**

(...)

**Eichstaedt, J. C.**, Ungar, L. H., Merchant, R., & Guntuku, S. C. (2018, February). *Detecting Depression on Facebook*. Talk presented at the Annual Meeting of the Society of Personality and Social Psychology, Atlanta, GA.

Ungar, L. H., Jaidka, K., & Eichstaedt, J. C (2018, February). *Mapping Well-Being Using Twitter*. Talk presented at the Annual Meeting of the Society of Personality and Social Psychology, Atlanta, GA.

Buffone A., Rieman, D., **Eichstaedt, J.C.**, Giorgi, S., Unga, L. H., & Seligman, M. E. P. (2018, February). *Stress in Individuals and Communities? Big Data-Driven Insights into Individual and Community-Level Stress*. Talk presented at the Annual Meeting of the Society of Personality and Social Psychology, Atlanta, GA.

**Eichstaedt, J. C.**, (2017, July). *Character Strengths in the Language of Social Media*. In J. C. Eichstaedt (Chair), Big data insights about character strengths, empathy, and physical health. Symposium at the Fifth World Congress on Positive Psychology, International Positive Psychology Association, Montreal, Canada.

- **Eichstaedt, J. C.** (2017, January). *Emotional Patterns of Depression: Unobtrusive Experience Sampling over Months through Social Media Language* (in Big Data Insights: Linguistic Predictors of Physical and Mental Health). Annual Meeting of the Society for Personality and Social Psychology, Well-Being preconference, San Antonio, TX, January 2017
- Buffone, A. E. K., Gabriel, S., Poulin, M. J., **Eichstaedt, J. C.**, Son, Y., Ungar, L. H., & Seligman, M. E. P. (2017, January). *Counterfactual use and religiosity. Survey-based and big data-derived insights into a cognitive process with implications for religiosity and spirituality.* Paper presented at the Religion and Spirituality Preconference, at the annual meeting of the Society for Personality and Social Psychology, San Antonio, TX.
- **Eichstaedt, J. C.** (2016, May). *Emotions in motion: Unobtrusive experience sampling over months through social media language.* In J. Landy (Chair), Data collection in the twenty-first century: New approaches to conducting psychological studies. Presented at the 28th Annual Meeting of the Association for Psychological Science, Chicago, IL.
- **Eichstaedt, J. C.** (2016, January). *Measuring the health of populations through social media*. Invited talk on the Presidential Symposium on Big Data. Symposium conducted at the 17th Annual Meeting of the Society of Personality and Social Psychology, San Diego, CA.
- Smith, L. K., **Eichstaedt, J. C.** (2016, January). *Using Twitter to measure county-level wellbeing*. In L. Ungar (Chair), Big data studies in regional variation of well-being, culture and behavior. Symposium conducted at the 17th Annual Meeting of the Society of Personality and Social Psychology, San Diego, CA.
- Mao, A. Y., Mathews, R., Chen, C., **Eichstaedt, J. C.**, Pendergraft, T. B., Manassei, H., ... & Putrino, C. S. (2016). *Feasibility of a Smartphone-Based Health Coaching Intervention for Patient Self-Management of Risk Prevention After Acute Myocardial Infarction*. Circulation, 134 (suppl. 1), A18295-A18295.
- Schwartz, H. A., Merchant, R., **Eichstaedt, J. C.** & Ungar, L. H. (2015, November). Panel on Digital Media at the American Heart Association Resuscitation Science Symposium, Orlando, FL.
- **Eichstaedt, J. C.** (2015, June). *Health and policy*. In M. Kern (Chair), What's all the hype? Big data and positive psychology. Symposium conducted at the Fourth World Congress on Positive Psychology, Lake Buena Vista, FL.
- Park, G., Le Nguyen, K. D., Schwartz, H. A., **Eichstaedt, J. C.**, Seligman, M. E. P., & Ungar, L. H. (2015, May). *The personalities of places: Estimating regional personality with Twitter language*. Poster presented at the 27th annual meeting of the Association for Psychological Science, New York, NY.
- Schwartz, H. A., **Eichstaedt, J. C.,** Park, G., Kern, M., Seligman, M. E. P., & Ungar, L. H (2015, May). *Testing 100,000 hypotheses: Social media as a source for open-vocabulary exploratory analyses*. In V. Purdie-Vaughns (Chair), Computational methods for linguistic

- insights into personality and behavior. Symposium conducted at the 27th Annual Meeting of the Association for Psychological Science, New York, NY.
- Schwartz, H. A., **Eichstaedt, J. C.**, Sap, M., Park, G., Merchant, R., & Ungar, L. H. (2015, May). *Predicting America's top killers: Exploring country-level mortality rates in the language of Twitter*. In Using computational methods to improve health care. Paper panel presentation at the Computational Social Science Summit 2015, Evanston, IL.
- **Eichstaedt, J. C.** (2015, March). Tracking the prevalence of depression and anxiety for large populations using Facebook and Twitter. In J. C. Eichstaedt (Chair), My N is ten million: Using social media to track emotion, mental health, and measure personality across entire populations. Symposium conducted at the inaugural meeting of the International Convention of Psychological Science, Amsterdam, Netherlands.
- **Eichstaedt, J. C.**, & Smith, L. K. (2015, February). *Status updates of distress: Tracking depression and anxiety of large populations through Facebook and Twitter*. In G. J. Park (Chair), Finding psychological signal in a billion tweets: Measurement through the language of social media. Symposium conducted at the 16th Annual Meeting of the Society of Personality and Social Psychology, Long Beach, CA.
- **Eichstaedt, J. C.**, Park, G. J., Kern, M. L., Schwartz, H. A., Roepke, A. M., Sap, M., Ungar, L. H., & Seligman, M. E. P. (2014, November). *I hate my life: Observing depression and anxiety in the language used on Facebook across 16,507 users*. Poster presented at the 48th Annual Association for Behavioral Cognitive Therapy Convention, Philadelphia, PA.
- Schwartz, H. A., Park, G. J., **Eichstaedt, J. C.**, Preotiuc-Pietro, D., Sap, M., & Smith, L. K. (2014, November). *Analysis of detecting depression and PTSD in Twitter*. Talk presented at the 2014 Computational Linguistics and Clinical Psychology Hackathon, Baltimore, MD.
- Park, G., Schwartz, H. A., **Eichstaedt, J. C.,** Kern, M. L., Seligman, M. E. P., & Ungar, L. H. (2014, August). *The World Well-Being Project: Psychological insight through language analysis*. Talk presented at SIG KDD 2014, New York, NY.
- **Eichstaedt. J. C.**, Kern, M. L., Seligman, M. E. P. (2014, May). *Using Data-driven Language Analysis to Explore Personality, Age, and Community Psychological Correlates of Heart Disease*. Symposium talk presented at the 26<sup>th</sup> annual meeting of the Association for Psychological Science, San Francisco, CA.
- **Eichstaedt, J. C.,** Kern, M. L., Schwartz, H. A., Park, G., Ungar, L. H., Dziurzynsky, L., Seligman, M. E. P. (2014, May). *The Stories of Our Lives on Facebook: Using Language to Study Development*. Poster presented at the 26<sup>th</sup> annual meeting of the Association for Psychological Science, San Francisco, CA.
- Park, G., Schwartz, H. A., **Eichstaedt, J. C.,** Kern, M. L., Sap, M., Ungar, L. H., Seligman, M. E. P. (2014, May). *Personality Assessment through Social Media Language: Validity and Reliability*. Poster presented at the 26<sup>th</sup> annual meeting of the Association for Psychological Science, San Francisco, CA.

- Sap, M., Park., G., Schwartz, H. A., Wan, G., Eichstaedt, J. C., Kern, M. L., Seligman, M. E. P, Ungar, L. H. (2014, May). *I was, I am, I will: Assessing Temporal Orientation Through Social Media*. Poster presented at the 26<sup>th</sup> annual meeting of the Association for Psychological Science, San Francisco, CA.
- Tsukayama, E., Galla, B. M., Park, G., Schwartz, H. A., **Eichstaedt, J. C.,** Kern, M. L., Sap, M., Seligman, M. E. P., Ungar, L. H. (2014, May). *Fitter, happier, more productive: An openlanguage analysis of conscientiousness across the lifespan.* Poster presented at the 26<sup>th</sup> annual meeting of the Association for Psychological Science, San Francisco, CA.
- Kern, M. L., **Eichstaedt, J. C.**, Park, G., Schwartz, H. A., Ungar, L. H., Stillwell, D. J., Kosinski, M., & Seligman, M. E. P. (2014, February). *An open vocabulary approach to personality*. Poster presented at the 15th annual meeting of the Society of Personality and Social Psychology, Houston, TX.
- **Eichstaedt, J. C.,** Kern, M. L., Schwartz, H. A., Dziurzynsky, L., Seligman, M. E. P., & Ungar, L. H. (2013, June). *What's it like to be 17? Using supercomputers and social media to study positive human development.* Talk presented at the International Positive Psychology Association 3rd World Congress, Los Angeles, CA.
- Kern, M. L., **Eichstaedt, J. C.,** Schwartz, H. A., Dziurzynski, L., Ungar, L. H., & Seligman, M. E. P. (2013, May). *What's it like to be "neurotic"? An open vocabulary approach to personality.* Poster presented at the Modern Modeling Methods (M3) conference, Storrs, CT.
- **Eichstaedt, J. C.,** Schwartz, H. A., Kern, M. L., (2013, January) *The World Well-Being Project: Creating the Infrastructure to measure Psychological States for entire populations through Social Media*. Talk presented at the Society for Personality and Social Psychology 2013, Pre-Conference on Dynamical Systems and Computational Social Psychology, New Orleans, LA.
- **Eichstaedt, J.C.**, Schwartz, H.A., Kern, M.L., Dziurzynski, L., Ramones, S.M., Kosinski, M., Stillwell, D.J., Seligman, M.E.P., Ungar, L.H. (2012, June). *Unobtrusively Measuring the Well-Being of Large Populations: the World Well-Being Project*. Talk presented at the 6th European Conference on Positive Psychology, Moscow, Russia.
- Mangelsdorf, J., **Eichstaedt, J.C.**, & Kern, M. L. (2012, June). *Comprehensive Growth Ability: Thriving through positive and negative life events*. Talk presented at the 6th European Conference on Positive Psychology, Moscow, Russia.
- Kern, M. L., Schwartz, H. A., **Eichstaedt, J. C.**, Ramones, S. M., Dziurzynski, L., Kosinski, M., ..., Ungar, L. H. (2012, June). *Personality and word use: Positive and negative expressions of the self through social media*. Poster presented at the 6th European Conference on Positive Psychology, Moscow, Russia.
- **Eichstaedt, J.C.** (2012, May). Computational Psychology and the World Well-Being Project: Tracking the Psychological States of Entire Populations through Social Media. Talk presented at Human Complexity 2012, Charlotte, NC.

## **TEACHING**

## **Graduate (Stanford)**

2020 -	<b>PSYCH 290</b>	/ SOC 281 /	/ SYMSYS 1	95T -

Natural Language Processing and Machine Learning in the Social Sciences

2021 – 2022 Academic Co-Director: Graduate Fellow Seminar in Human-Centered A.I.

## **Graduate (University of Pennsylvania)**

2011 - 2014	Introduction to Positive Psychology (Assistant Instructor)
2012	Humanities and Human Flourishing (Assistant Instructor)
2013	Assessment and Classification (Assistant Instructor)

## **Undergraduate (University of Pennsylvania)**

2016	Introduction to Experimental Psychology (TA)
2015	Personality and Individual Differences (TA)

## PROFESSIONAL AFFILIATIONS

Stanford Bio-X Interdisciplinary Biosciences Institute Stanford Wu Tsai Human Performance Alliance

Association for Psychological Science Society for Social and Personality Psychology Society for Affective Science International Positive Psychology Association German Physics Society (DPG)

### SERVICE TO PROFESSION

### Ad hoc reviewer for:

National Science Foundation

Proceedings of the National Academy of Sciences

Psychological Science

Journal of Experimental Social Psychology

Social Psychological and Personality Science

Journal of Research in Personality

Journal of Positive Psychology

Computers and Human Behavior

PLOS One

BMJ Open

The Lancet Psychiatry

International AAAI Conference on Web and Social Media (ICWSM)

## ACM CHI Conference on Human Factors in Computing Systems

### **UNIVERSITY SERVICE**

### **Stanford University**

2020, 2021 HAI Assistant Professor Search Committee
 2022 – Psychology Outreach and Media Committee
 2020 – 2022 Psychology Open-Science Committee

#### Postdoc Advisor:

2023 – Betsy Stade (Psychology & Psychiatry)

2023 – Jonas Schoene (Psychology)

2023 – Christopher Kelly (Psychology & HAI)

Ph.D. Advisor:

2021 – 2022 Tiffany Hsu (Psychology)

Ph.D. Dissertation Committee Chair:

2022 – 2023 Austin van Loon (Sociology)

Ph.D. Dissertation Committee Member:

2022 – Brendan Fereday (Education)

2021 – Eva Bianchi (Civil and Environmental Engineering)

2020 – Jim Malamut (Education) 2020 – Isabelle Tay (Education)

2020 – 2021 Adam Lavertu (Bioinformatics)

2020 Pin Pin Tea-Mangkornpan (Graduate School of Business)

First-Year Ph.D. Project Reader:

2020 Tara Srirangarajan

## **External University Service**

Ph.D. Dissertation Committees:

2022 – 2023 Matthew Mattero (Stony Brook University: Computer Science)

2020 – 2022 Huy Vu (Stony Brook University: Computer Science)

## University of Pennsylvania

2011, 2013, 2016 Postdoc Search Committee in Psychology

2011, 2015, 2016 Postdoc Search Committee in Computer Science

## START-UP & PROFESSIONAL EXPERIENCE

2023 –	Scientific Advisory Board & Chief Scientist, Jimini Health, Inc. (Delivering mental health care with LLM systems)
2022 –	Principal Advisor, Candid, LLC. (A well-being and mental health-focused social media platform)
2022 –	Advisor, Sonar, LLC. (Using NLP to create early warning system for student mental health)
2021 –	Co-Founder, The Shot Caller, LLC. (A rating agency for social financial influencers)
2017 –	Chief Founding Scientist, Stitched Insights, LLC. (NLP for product insight)
2020 - 2022	Advisor, KI Park Berlin (Government special economic area for AI)
2016 –	Board of Advisors, Ransomly, LLC. (Digital well-being app)
2016 – 2019	Technology Advisor, Keriton, LLC. (Networked medical devices)
2016	Senior Scientific Advisor, Heads Together, The Royal Foundation, UK. (Digital mental health care delivery across networked health systems)
2015 – 2016	Chief Science Officer, Emodt, LLC. (Well-being tracking through NLP)

## ADDITIONAL TRAINING

Monastic Training in Meditation (Vipassana, Tibetan Buddhism, Tai Chi)

Essentials of Management Certification, University of Pennsylvania

## SELECTED MEDIA COVERAGE

2023	The New York Times. The Worst People Run for Office. It's Time for a Better Way.
2020	The New York Times. Is Everybody Doing OK? Let's Ask Social Media
2020	The New York Times. How to Hug During a Pandemic
2020	The New York Times. 5 Rules to Live By During a Pandemic

2019	The New York Times. 'Screen Time' Is Over
2018	WIRED. Your Facebook Posts Can Reveal If You're Depressed.
2018	Der Spiegel. Facebook-Postings können auf Depressionen hinweisen.
2016	The New York Times. Women From Venus, Men Still From Mars on Facebook, Study Finds.
2015	Washington Post. Tweets can better predict heart disease rates than income, smoking and diabetes, study finds.
2015	The New Yorker. What Your Tweets Say About You.
2015	Fast Company. Study: Twitter can help predict chances of coronary heart disease.