

Johannes C. Eichstaedt

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ACADEMIC POSITIONS

- Postdoctoral Fellow, University of Pennsylvania, Philadelphia, PA** May 2017 – present
Positive Psychology Center
- Founding Lead Research Scientist, World Well-Being Project** Sept. 2011 – Aug. 2012
Positive Psychology Center, University of Pennsylvania, Philadelphia, PA
- Created computational infrastructure to track psychological constructs in massive social media datasets in time and space
 - Taught and graded graduate students in *Introduction to Positive Psychology* (Seligman) and *Research Methods* (Duckworth)
- Assistant Instructor & Advisor, University of Pennsylvania, Philadelphia, PA** Sept. 2011 – present
- Master of Applied Positive Psychology Capstone advisor to Judith Mangelsdorf (2013), Jiaqui Wu (2014), Kunal Sood (2016)

EDUCATION

- Doctor of Philosophy, Psychology - University of Pennsylvania, Philadelphia, PA** Sept. 2012 – May 2017
- Founded and co-led a data-science research group (World Well-Being Project, wwbp.org)
 - 2 years of training in psychodiagnostic assessment and psychotherapy
- Dissertation: “Predicting and Characterizing the Health of Individuals and Communities Through Language Analysis of Social Media”
Advisor: Martin Seligman
- Master of Arts, Psychology - University of Pennsylvania, Philadelphia, PA** Sept. 2012 – May 2013
Thesis: “Twitter Predicts Heart Disease”
- Master of Applied Positive Psychology - University of Pennsylvania, Philadelphia, PA** Sept. 2010 – Aug. 2011
Capstone thesis: “Unobtrusively Measuring the Well-Being of Entire Nations: The World Well-Being Project”
- Master of Science, Physics - University of Chicago & Argonne National Laboratories, IL** Sept. 2009 – Aug. 2010
Thesis: “A simulation-based characterization of a tagged Barium source and determination of optimal operation parameters for the capture of the released Barium ions in a radio-frequency quadrupole”
- Bachelor of Science (Joint Honours), Physics & Philosophy - King’s College London, London, UK** Sept. 2005 – Aug. 2009
1st class Honours, year abroad 2007 – 2008 spent at the University of Chicago, IL)

PUBLIC POLICY

- United Nations, New York, NY** April 2012 – July 2016
- Presented in the *General Assembly* on the future of big data psychology, NOVUS summit
 - Presented on *Economic and Social Council* (ECOSOC) panel on the power of collaboration between disciplines
 - Expert member (invited by Bhutan) on an ECOSOC High-Level Meeting panel on global assessments of well-being
- Organization for Economic Collaboration and Development (OECD), Guadalajara, Mexico** October 2015
- Invited by the OECD to present on “New tools and approaches for well-being policy: Big and crowd-sourced data” during the OECD World Forum

GRANTS

- University of Pennsylvania, Philadelphia, PA** April 2017
Co-PI on sub-grant to derive county-level well-being indicators (\$50,000)
- Templeton Religious Trust, Nassau, Bahamas** Feb. 2014
Investigator on Grant: “The World Well-Being Project: Measuring well-being using big data, social media, and language analysis” (Total grant volume \$3,835,702)
- Studienstiftung des Deutschen Volkes (German National Academic Foundation), Bonn, Germany** Feb. 2012
Awarded ERP (Marshall Fund) Fellowship for study in the U.S. to further the transatlantic relationship (\$90,000 package)

- University of Pennsylvania, Philadelphia, PA** Feb. 2012
Awarded Benjamin Franklin Fellowship to pursue doctoral studies in Psychology (\$300,000 package)
- University of Chicago, Chicago, IL** Sept. 2009
Awarded tuition scholarship on merit to pursue studies in Physics (\$25,000)

AWARDS

- University of Pennsylvania, Philadelphia, PA** Feb. 2015
Selected as a Dean's Scholar for "outstanding academic performance and intellectual promise"
- American Association for the Advancement of Science (AAAS), Washington, DC** Oct. 2013
Elected as an "Emerging Leader in Science and Society" to rethink mental health care delivery in interdisciplinary team
- King's College London, London, UK** Sept. 2009
- Awarded King's College's highest honor, the Jelf Medal, presented to the most distinguished graduates (10 out of 4,500)
 - Elected as an Associate of Kings College (AKC)

INDUSTRY EXPERIENCE

- Technology Advisor, Keriton, LLC, Philadelphia, PA.** Sept. 2016 – present
- Keriton develops products for neonatal intensive care units. Raised \$1,100,000 as of Feb. 2017.
- Board of Advisors, Ransomly, LLC, Sand Diego, CA.** May 2016 – present
- Ransomly develops apps and beacons to selectively shut down smartphone intrusion, raised \$12,000 on Kickstarter.
- Senior Scientific Advisor, Heads Together & The Royal Foundation, London, UK.** July 2016 – Dec. 2016
- Reviewed and shortlisted the science behind technology levers to increase access to mental health across the UK
 - Policy solutions publicized by the Duke and Duchess of Cambridge and Prince Harry
- Chief Science Officer, Emodt, LLC, Pittsburgh, PA.** Oct. 2013 – July 2015
- Developed solutions to measure and map emotions in corporations based on text analysis. Raised \$100,000.

PUBLICATIONS

- Yaden, D. B., Le Nguyen, K. D., Kern, M. L., Belser, A. B., **Eichstaedt, J. C.**, Iwry, J., ... & Newberg, A. B. (2016). Of Roots and Fruits A Comparison of Psychedelic and Nonpsychedelic Mystical Experiences. *Journal of Humanistic Psychology*. p. 0022167816674625
- 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.
- 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.
- 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?' *Proceedings of the 2014 Conference on Empirical Methods in Natural Language Processing (EMNLP)*
- 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*.
- 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.
- 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*.
- 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. *Proceedings of the Workshop on Computational Approaches to Subjectivity, Sentiment and Social Media Analysis (WASSA), NAACL*.

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

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. *Pacific Symposium on Biocomputing* 21:516-527.

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.*

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. *NAACL-2015: Conference of the North American Chapter of the Association for Computational Linguistics.*

Duckworth, A. L., **Eichstaedt, J. C.**, & Ungar, L. H. (2015), The Mechanics of Human Achievement. *Social and Personality Psychology Compass*, 9, 359–369.

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. Proceedings of the *Workshop on Computational Linguistics and Clinical Psychology: From Linguistic Signal to Clinical Reality, NAACL.*

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

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.

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*, doi:http://dx.doi.org/10.1037/pspp0000020.

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. *Conference on Empirical Methods in Natural Language Processing (EMNLP)*. Doha, Qatar.

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. *ACL 2014 Workshop on Computational Linguistics and Clinical Psychology*, 118.

Kern, M. L., **Eichstaedt, J. C.**, Schwartz, H. A., Dziurzynski, L., Ungar, L. H., Stillwell, D. J., ... & Seligman, M. E. P. (2014). The online social self: An open vocabulary approach to personality. *Assessment*, 21, 158-169.

Kern, M. L., **Eichstaedt, J. C.**, Schwartz, H. A., Park, G., Ungar, L. H., Stillwell, D. J., ... & Seligman, M. E. P. (2014). From “sooo excited!!!” to “so proud”: Using language to study development. *Developmental Psychology*, 50, 178-188

Schwartz, H. A., **Eichstaedt, J. C.**, Kern, M. L., Dziurzynski, L., Ramones, S. M., Agrawal, M., Shah, A., Kosinski, 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, e73791.

Eichstaedt, J. C.¹, Schwartz, H. A.¹, 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)*. Boston, MA. (¹Equal contribution.)

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*. Stanford, CA.

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*.

PUBLISHED ABSTRACTS

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INVITED TALKS

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Eichstaedt, J. C. (2016, July). *Big Data Psychology*. Presentation at the United Nations General Assembly as part of the NOVUS Innovation Summit, New York City, New York.

Eichstaedt, J. C. (2016, February). Eichstaedt, J. C. (2015, June). Measuring Psychological States Through Social Media. Invited talk presented as part of the Presidential Symposium at the 17th annual meeting of the Society of Personality and Social Psychology, San Diego, CA.

Eichstaedt, J. C. (2015, June). Measuring Psychological States Through Social Media. Invited talk presented at the Alfred Krupp Institute for Advanced Studies in Greifswald, Germany.

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

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

CONFERENCE PRESENTATIONS

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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. Talk presented at the Sessions on Big Data at the Instituto Nacional de Estadística y Geografía (INEGI), Mexico City, Mexico.

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 26th 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., Dziurzynski, L., Seligman, M. E. P. (2014, May). The Stories of Our Lives on Facebook: Using Language to Study Development. Poster presented at the 26th 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 26th 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 26th annual meeting of the Association for Psychological Science, San Francisco, CA.

Tsakayama, 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 open-language analysis of conscientiousness across the lifespan. Poster presented at the 26th 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., Dziurzynski, 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.

SKILLS

Languages: Basic French, fluent Spanish, fluent English, native German, fluent R, SQL, ggplot; decent Python; ok Java, Linux shell

Essentials of Management Certification, *University of Pennsylvania, Philadelphia, PA*

Hobbies: Extended solo trekking trips: traverses of major mountain ranges in Siberia, Russia (2012), U.S. (2011, 2013, 2014, 2015, 2016), Bolivia (2010), Peru (2009), Kyrgyzstan (2006), Ladakh/India (2006, 2012); 375 mile arctic traverse in Scandinavia (2007); Graduate of BackpackingLight's Wilderness Trekking School (2008); PADI Advanced Open Water Diver with 45 dives