Jeffrey R. Spies

Curriculum Vitae

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Introduction

I am the co-founder and Chief Technology Officer (CTO) of the Center for Open Science (COS; http://cos.io), a non-profit technology company missioned to increase openness, integrity, and reproducibility of scholarly research. As CTO, I am responsible for organizational strategy with a focus on the technical, product vision, software architecture and technical stack of COS products and services, external partner and funder development, and management of COS Labs–COS's research and development team. I also co-lead SHARE (http://share-research.org)–an initiative by the Association of Research Libraries and COS to create a free, open dataset of research activity across the research life-cycle. I have a Ph.D. in Quantitative Psychology from the University of Virginia, where I now hold a Visiting Assistant Professor position in the Department of Engineering and Society. My dissertation included the development of the Open Science Framework (http://osf.io)–a free, open source workflow management system and scholarly commons that is now the flagship product of COS.

Positions

2013–	Co-founder and Chief Technology Officer (CTO)	Center for Open Science
2014–	Co-lead	SHARE
2016–	Visiting Assistant Professor, Department of Engineering and Society	University of Virginia
2015–2016	Visiting Scholar, Department of Engineering and Society	University of Virginia
2010–2013	Statistical Computing Instructor and Consultant	University of Virginia
2009–2010	Research Assistant	University of Virginia
2008–2009	National Institute of Aging Training Fellow	University of Virginia
2008	Laboratory Manager, Human Dynamics Laboratory	University of Virginia
2006–2007	Laboratory Manager, Laboratory for the Quantitative Investigation of Human Dynamics	University of Notre Dame
2004–2007	Departmental Graduate Fellow	University of Notre Dame

Education

2013	Ph.D.	Quantitative Psychology	University of Virginia
2007	M.A.	Quantitative Psychology (joint Computer Science)	University of Notre Dame
2004	B.S.	Computer Science, Second Major: Psychology	University of Notre Dame

Grants, Honors, and Awards

2013–	Grants to COS from Laura and John Arnold Foundation, Alfred P. Sloan Foundation, John Templeton Foundation, National Institutes of Health, William and Flora Hewlett Foundation, National Science Foundation, DARPA, IARPA, and others	$21,250,000
2016	Association for Psychological Science Rising Star for early career scientists whose "work has already advanced the field and signals great potential for their continued contributions"	-

2016–2017	Grant to ARL & COS from Alfred P. Sloan Foundation and Institute of Museum and Library Services: SHARE Phase 2	$1,200,000
2015	Co-author of Reproducibility Project: Psychology (published in *Science*) that was #8 of Top 100 Stories of 2015 by Discover Magazine, #6 by Science News, #5 in Altmetric100, Nature Magazines Top Science Stories of 2015, Wired Magazines Most Winningest Science 2015, New Yorkers 6 Most Interesting Psychology Papers and Most Notable Medical Findings, and a runner-up for Breakthrough of the Year by Science Magazine	-
2013–2017	Grant from Laura and John Arnold Foundation to establish the Center for Open Science	$5,250,000
2012	Robert J. Huskey Travel Fellowship	$550
2012	Graduate Student Choice Colloquium Winner	-
2012	PyCon 2012 Travel Award	$1,060
2011–2012	Learning Assessment Grant from UVA's Center for Teaching Excellence Program to train on and assess the use of the statistical language *R* in undergraduate statistics education	$1,750
2010–2013	Teaching and Technology Support Partners Program	Tuition & Stipend
2010	Doris Buffet Fellowship	$1,750
2008–2013	LIFE Program Fellow	-
2008–2009	National Institute on Aging Quantitative Training Grant	Tuition & Stipend
2005	The Center for Research Computing SGI Award for Computational Science and Visualization	$1,000
2003–2010	Departmental Graduate Fellowship (accepted through 2007)	Tuition & Stipend

Publications

Refereed Articles

1. Anderson, C. J., Bahník, Š., Barnett-Cowan, M., Bosco, F. A., Chandler, J., Chartier, C. R., Cheung, F., Christopherson, C. D., Cordes, A., Cremata, E. J., Della Penna, N., Estel, V., Fedor, A., Fitneva, S. A., Frank, M. C., Grange, J. A., Hartshorne, J. K., Hasselman, F., Henninger, F., van der Hulst, M., Jonas, K. J., Lai, C. K., Levitan, C. A., Miller, J. K., Moore, K. S., Meixner, J. M., Munafò, M. R., Neijenhuijs, K. I., Nilsonne, G., Nosek, B. A., Plessow, F., Prenoveau, J. M., Ricker, A. A., Schmidt, K., Spies, J. R., Stieger, S., Strohminger, N., Sullivan, G. B., van Aert, R. C. M., van Assen, M. A. L. M., Vanpaemel, W., Vianello, M., Voracek, M., & Zuni, K. (2016). Response to comment on "Estimating the reproducibility of psychological science". *Science*, **351**(6277), 1037–1037. doi:10.1126/science.aad9163. eprint: http://science.sciencemag.org/content/351/6277/1037.3.full.pdf
2. McKiernan, E. C., Bourne, P. E., Brown, C. T., Buck, S., Kenall, A., Lin, J., McDougall, D., Nosek, B. A., Ram, K., Soderberg, C. K., Spies, J. R., Thaney, K., Updegrove, A., Woo, K. H., & Yarkoni, T. (2016, July). How open science helps researchers succeed. *eLife*, **5**, e16800. doi:10.7554/eLife.16800
3. Open Science Collaboration. (2015). Estimating the reproducibility of psychological science. *Science*, **349**(6251). doi:10.1126/science.aac4716
4. Brandt, M. J., IJzerman, H., Dijksterhuis, A., Farach, F. J., Geller, J., Giner-Sorolla, R., Grange, J. A., Perugini, M., Spies, J. R., & van 't Veer, A. (2014). The replication recipe: what makes for a convincing replication? *Journal of Experimental Social Psychology*, **50**, 217–224. doi:10.1016/j.jesp.2013.10.005
5. Nosek, B. A., Spies, J. R., & Motyl, M. (2012). Scientific Utopia II: Restructuring incentives and practices to promote truth over publishability. *Perspectives on Psychological Science*, **7**, 610–626. doi:10.1177/1745691612459058
6. Open Science Collaboration. (2012). An open, large-scale, collaborative effort to estimate the reproducibility of psychological science. *Perspectives on Psychological Science*, **7**, 652–655. doi:10.1177/1745691612462588

7. Boker, S. M., Cohn, J. F., Theobald, B.-J., Matthews, I., Mangini, M., Spies, J. R., Ambadar, Z., & Brick, T. R. (2011). Something in the way we move: Motion dynamics, not perceived sex, influence head movements in conversation. *J Exp Psychol Hum Percept Perform*, **37**(3), 874–91. doi:10.1037/a0021928
8. Boker, S., Neale, M., Maes, H., Wilde, M., Spiegel, M., Brick, T., Spies, J., Estabrook, R., Kenny, S., Bates, T., Mehta, P., & Fox, J. (2011). OpenMx: an open source extended structural equation modeling framework. *Psychometrika*, **76**(2), 306–317. doi:10.1007/s11336-010-9200-6
9. Jones, C. R. G., Claassen, D. O., Yu, M., Spies, J. R., Malone, T., Dirnberger, G., Jahanshahi, M., & Kubovy, M. (2011). Modeling accuracy and variability of motor timing in treated and untreated Parkinson's disease and healthy controls. *Front Integr Neurosci*, **5**, 81. doi:10.3389/fnint.2011.00081
10. Boker, S. M., Cohn, J. F., Theobald, B.-J., Matthews, I., Brick, T. R., & Spies, J. R. (2009). Effects of damping head movement and facial expression in dyadic conversation using real-time facial expression tracking and synthesized avatars. *Philos Trans R Soc Lond B Biol Sci*, **364**(1535), 3485–95. doi:10.1098/rstb.2009.0152
11. Brick, T. R., Spies, J. R., Theobald, B.-J., Matthews, I., & Boker, S. M. (2009). High-presence, low-bandwidth, apparent 3d video-conferencing with a single camera. In *Proceedings of the 9th International Workshop on Image Analysis for Multimedia Interactive Services*.
12. Theobald, B.-J., Matthews, I., Mangini, M., Spies, J. R., Brick, T. R., Cohn, J. F., & Boker, S. M. (2009). Mapping and manipulating facial expression. *Lang Speech*, **52**(Pt 2-3), 369–86.

Book chapters

1. Open Science Collaboration. (in press). Maximizing the reproducibility of your research. In *Psychological Science Under Scrutiny: Recent Challenges and Proposed Solutions*. Wiley.
2. Open Science Collaboration. (2014). The Reproducibility Project: A model of large-scale collaboration for empirical research on reproducibility. In V. Stodden, L. Friedrich, & R. D. Peng (Eds.), *Implementing Reproducible Computational Research*. Chapman and Hall/CRC.
3. Lubke, G. & Spies, J. (2008). Choosing a correct mixture model: Power, limitations, and some help from graphics. In G. R. Hancock & K. M. Samuelson (Eds.), *Mixture Models in Latent Variable Research* (pp.343–362). Information Age Publishing.

Software Projects, Libraries, & Patents

Director & Architect	• OSF - Platform as a Service (including libraries and services) • Open Science Framework (osf.io) Workflow Management System • OSF Preprints and branded services (e.g., SocArXiv) • OSF Institutions • OSF Meetings • SHARE Database and Tools • COS R&D (e.g., Federal and Institutional Manuscript Submission System, SHARE Institutional Dashboards)
Architecture Advisor	• IARPA CREATE Decision-Making Platform
Lead Developer	• benchmark • HDTreeV
Core Developer	• OpenMx: Multipurpose Software for Statistical Modeling
Provisional Patent	• Boker, S. M., Brick, T. R., & Spies, J. R. System and Method for Low Bandwidth Image Transmission. U.S. Patent Application No. 13/059,586, February 17, 2011.

Refereed Talks

2016.12 A Store of Preprints and Curation Networks: Efficiently Scaling Community Outreach Using Public Goods Infrastructure, Coalition for Networked Information Fall 2016 Meeting, Washington, DC

2016.12 Weaving Together Preservation and Active Research, Coalition for Networked Information Fall 2016 Meeting, Washington, DC
2016.12 Building Tools and Services to Support Research Software Preservation and Sharing, Coalition for Networked Information Fall 2016 Meeting, Washington, DC
2016.10 Learning to Learn: Technology's Demand of a Next-Generation Mindset, Teaching and Technology Summit, Charlottesville, VA
2016.04 Expert Curation of SHARE Dataset, Coalition for Networked Information Spring 2016 Meeting, San Antonio, TX
2015.06 Making Connections: SHARE and the Open Science Framework, Open Repositories 2015, Indianapolis, IN
2015.04 SHARE Project Update, Coalition for Networked Information Spring 2014 Meeting, Seattle, WA
2014.12 Update on SHARE Developments, Coalition for Networked Information Fall 2014 Meeting, Washington, DC
2014.05 Open Science Opening Doors for Student Contribution, Association for Psychological Science, San Francisco, CA
2013.06 The Open Science Framework: Improving, by Opening, Science, SciPy 2013, Austin, TX
2013.05 Open Source Software in Open Science Pre-conference, Association for Psychological Science, Washington, DC
2013.01 Openness in Scientific Report Symposium, Society for Personality and Social Psychology, New Orleans, LA
2012.03 Open Science Framework Lightning Talk, PyCon 2012, Santa Clara, CA

Invited Talks

2017.02 IARPA CREATE Kick-off Plenary, McLean, VA
2016.10 Preservation and Archiving Special Interest Group Fall 2016 Meeting, New York, NY
2016.10 Rigor and Relevance in Scholarly Publishing, Notre Dame, IN
2016.10 University of Virginia Materials Science and Engineering Seminar, Charlottesville, VA
2016.09 Association of Research Libraries Annual Director's Meeting, Washington, DC
2016.07 SHARE Community Meeting, Charlottesville, VA
2016.07 Jisc/CNI Conference, Oxford, UK
2016.06 International Workshop on Scholarly Gateways Keynote, Rome, Italy
2016.05 Association of Research Libraries/Canadian Association of Research Libraries Joint Meeting, Vancouver, BC, CA
2016.04 Society for Applied Multivariate Research Keynote, Dallas, TX
2016.03 SPARC MORE, Austin, TX
2016.02 Rensselaer Polytechnic Institute Center for Open Source Software, Troy, NY
2016.02 AAAS/Arnold Workshop: Modeling and Code, Washington, DC
2016.01 University of Virginia Developmental Psychology Seminar Series, Charlottesville, VA
2016.01 CENDI Meeting: Public Access Infrastructure, Ft. Belvoir, VA
2015.09 University of Notre Dame Computer Science and Entrepreneurship, Notre Dame, IN
2015.06 IndyPy, Indianapolis, IN
2014.10 SHARE Fall Meeting 2014, Washington, DC
2014.06 Virginia Scholarly Communications Forum, Charlottesville, VA
2013.10 DMPTool Webinar Series 11: Complementary Tools, Online
2013.09 Quantitative Research Retreat, Charlottesville, VA
2013.08 HackYourPhD aux States, Online
2012.12 University of Virginia Graduate Student Choice Psychology Colloquium, Charlottesville, VA

2012.11 Models of Infectious Disease Agent Study Network Workshop on Best Practices, Arlington, VA
2012.10 Open Science Summit, Mountain View, CA
2012.10 University of Virginia Cognitive Seminar Series, Charlottesville, VA
2012.04 University of Virginia Data Management Day, Charlottesville, VA
2010.03 University of Virginia Body Sensor Networks Seminar, Charlottesville, VA
2009.10 LIFE Fellows Research Academy, Ann Arbor, MI
2005.05 Max Planck Institute for Human Development, Berlin, Germany

Classroom Teaching

Instructor of Record
- Fundamentals of Statistical Computing (Fall 2010, Fall 2011)
- Engineering Projects in Community Service (Fall 2005, Spring 2006, Fall 2007)

Teaching Assistant
- Graduate Statistics (Fall 2005)

Non-Departmental Teaching

Director
- Software Engineering Internship Program, 129 interns, 27 later hired as full-time staff; COS, Charlottesville, VA (2013–)

Lead Instructor
- Agent-Based Modeling of Lifespan Development Workshop (2005)

Faculty
- International Workshop On Methodology Of Twin And Family Studies (2008, 2010)

Teaching Assistant
- APA Advanced Training Institute - Structural Equation Modeling in Longitudinal Research (2008, 2010)

Service

2017– Databrary Advisory Board
2016– Annotating All Knowledge (AAK) Coalition Steering Committee
2013– Center for Open Science Board of Directors (2017 onward: ex-officio, non-voting status)
2016 OpenCon Program Committee
2015–2016 SPARC Meeting Program Committee
2008–2013 Quantiative Curriculum Committee, University of Virginia
2005 Graduate Curriculum Committee, University of Notre Dame