

Jorrit H. Poelen

Independent Biodiversity Informatics/ Software Engineer
Research Scholar
Oakland, CA, USA

Email: jhpoelen@xs4all.nl
GitHub: github.com/jhpoelen
ORCID: 0000-0003-3138-4118
Homepage: jhpoelen.nl

Education

2000 **MSc.** Experimental Physics, University of Groningen, the Netherlands

Employment

2020-Present **Research Affiliate** Cheadle Center for Biodiversity and Ecological Restoration, UCSB
2020-Present **Research Scholar** Ronin Institute for Independent Scholarship, Montclair, NJ
2008-Present **Freelance Software Engineer** Berkeley/Oakland, CA
2012-2013 **Assistant Director** Translational Informatics Program, UCSF
2011-2012 **Software Engineer** Pandora Media Inc., Oakland, CA
2010-2011 **Software Engineer** Xoom Inc., San Francisco, CA
2006-2008 **Software Engineer/ Team Lead** GE Healthcare, Barrington, IL
2002-2006 **Software Engineer** GE Healthcare Zeist, the Netherlands
2001-2002 **Software Engineer** Tekadence Inc., San Francisco, CA
1999-2001 **Research Associate** School of Optometry, UC Berkeley

Publications

Google Scholar: goo.gl/dwyv7P

Refereed Journal Articles

2020 | Elliott, M. J., **Jorrit H. Poelen**, and Fortes, J. A. (2020). Toward reliable biodiversity dataset references. *Ecological Informatics*, 59:101132

- Gallagher, R. V., Falster, D. S., Maitner, B. S., Salguero-Gómez, R., Vandvik, V., Pearse, W. D., Schneider, F. D., Kattge, J., **Jorrit H. Poelen**, Madin, J. S., Ankenbrand, M. J., Penone, C., Feng, X., Adams, V. M., Alroy, J., Andrew, S. C., Balk, M. A., Bland, L. M., Boyle, B. L., Bravo-Avila, C. H., Brennan, I., Carthey, A. J. R., Catullo, R., Cavazos, B. R., Conde, D. A., Chown, S. L., Fadrique, B., Gibb, H., Halbritter, A. H., Hammock, J., Hogan, J. A., Holewa, H., Hope, M., Iversen, C. M., Jochum, M., Kearney, M., Keller, A., Mabee, P., Manning, P., McCormack, L., Michaletz, S. T., Park, D. S., Perez, T. M., Pineda-Munoz, S., Ray, C. A., Rossetto, M., Sauquet, H., Sparrow, B., Spasojevic, M. J., Telford, R. J., Tobias, J. A., Violle, C., Walls, R., Weiss, K. C. B., Westoby, M., Wright, I. J., and Enquist, B. J. (2020). Open science principles for accelerating trait-based science across the tree of life. *Nature Ecology & Evolution*, 4(3):294–303
- 2019 Grss, A., Palomares, M. L., **Jorrit H. Poelen**, Barile, J. R., Aldemita, C. D., Ortiz, S. R., Barrier, N., Shin, Y.-J., Simons, J., and Pauly, D. (2019). Building bridges between global information systems on marine organisms and ecosystem models. *Ecological Modelling*, 398:1 – 19
- Hayden, B., Palomares, M. L. D., Smith, B. E., and **J. H. Poelen** (2019). Biological and environmental drivers of trophic ecology in marine fishes - a global perspective. *Scientific Reports*, 9(1)
- 2018 Thessen, A. E., **Jorrit H. Poelen**, Collins, M., and Hammock, J. (2018). 20 GB in 10 minutes: a case for linking major biodiversity databases using an open socio-technical infrastructure and a pragmatic, cross-institutional collaboration. *PeerJ Computer Science*, 4:e164
- Hardisty, A. R., Michener, W. K., Agosti, D., Garca, E. A., Bastin, L., Belbin, L., Bowser, A., Buttigieg, P. L., Canhos, D. A., Egloff, W., Giovanni, R. D., Figueira, R., Groom, Q., Guralnick, R. P., Hobern, D., Hugo, W., Koureas, D., Ji, L., Los, W., Manuel, J., Manset, D., **Jorrit H. Poelen**, Saarenmaa, H., Schigel, D., Uhlir, P. F., and Kissling, W. D. (2019). The bari manifesto: An interoperability framework for essential biodiversity variables. *Ecological Informatics*, 49:22 – 31
- 2017 Pauli, J. N., Newsome, S. D., Cook, J. A., Harrod, C., Steffan, S. A., Baker, C. J. O., Ben-David, M., Bloom, D., Bowen, G. J., Cerling, T. E., Cicero, C., Cook, C., Dohm, M., Dharampal, P. S., Graves, G., Gropp, R., Hobson, K. A., Jordan, C., MacFadden, B., Pilaar Birch, S., **Poelen, J. H.**, Ratnasingham, S., Russell, L., Stricker, C. A., Uhen, M. D., Yarnes, C. T., and Hayden, B. (2017). Opinion: Why we need a centralized repository for isotopic data. *Proceedings of the National Academy of Sciences*, 114(12):2997–3001
- 2014 **Poelen, J. H.**, Simons, J. D., and Mungall, C. J. (2014). Global Biotic Interactions: An open infrastructure to share and analyze species-interaction datasets. *Ecological Informatics*, 24:148–159

- 2013 Simons, J. D., Yuan, M., Carollo, C., Vega-Cendejas, M., Shirley, T., Palomares, M. L., Roopnarine, P., Arenas, L. G. A., Ibañez, A., Holmes, J., Schoonard, C. M., Hertog, R., Reed, D., and **J. H. Poelen** (2013). Building a fisheries trophic interaction database for management and modeling research in the gulf of mexico large marine ecosystem. *Bulletin of Marine Science*, 89(1):135–160

Conference Proceedings

- 2019 **Poelen, Jorrit H** (2019). To connect is to preserve: on frugal data integration and preservation solutions. *Society for Preservation of Natural History Collections Annual Conference*
- 2018 **J. H. Poelen** (2018). Elton and nomer: two frugal tools to mobilize biodiversity data. *Digital Data in Biodiversity Research Conference*
- Kuhn, T., Meroo-Peuela, A., Malic, A., **J. H. Poelen**, Hurlbert, A. H., Centeno Ortiz, E., Furlong, L. I., Queralt-Rosinach, N., Chichester, C., Banda, J. M., Willighagen, E., Ehrhart, F., Evelo, C., Malas, T. B., and Dumontier, M. (2018). Nanopublications: A growing resource of provenance-centric scientific linked data. In *2018 IEEE 14th International Conference on e-Science (e-Science)*, pages 83–92
- 2017 Collins, M., Nicolson, N., **J. H. Poelen**, Thompson, A., Hammock, J., and Thessen, A. (2017). Building your own big data analysis infrastructure for biodiversity science. *Proceedings of TDWG Annual Conference*, 1:e20161
- J. H. Poelen** (2017). Global biotic interactions: A catalyst for integrating existing interaction datasets, connecting data curators and developing data exchange methods. *Proceedings of TDWG Annual Conference*, 1:e20214
- Simons, J. D. and **J. H. Poelen** (2017). Gomexsi: Using open platforms such as github, wordpress, and globi to manage, and share species interaction data. *Proceedings of TDWG Annual Conference*, 1:e20325
- 2016 **J. H. Poelen**, Schulz, K. S., and Hammock, J. (2016). Global biotic interactions: a case study in ecological data aggregation. *Proceedings of TDWG Annual Conference*
- Hammock, J. and **J. H. Poelen** (2016). Fresh data: what’s new and what’s interesting? *Proceedings of TDWG Annual Conference*
- 2015 Collins, M., Thompson, A., and **J. H. Poelen** (2015). Whole-dataset analyses using apache spark. *Proceedings of TDWG Annual Conference*

- 2014 | Simons, J. D., **J. H. Poelen**, Yuan, M., Vega-Cendejas, M. E., Carollo, C., Reed, D., and Ainsworth, C. H. (2014). Gulf of Mexico species interactions (gomexsi): Integrated ecosystem trophic data for ecopath models and ecosystem based fisheries management. *Fisheries Centre Research Reports: Ecopath 30 Years Conference Proceedings Extended Abstracts*, 22(3)

Patents/ Awards/ Honors

- 2013 | Encyclopedia of Life Rubenstein Fellowship award.
- 2006 | **Poelen, J. H.**, Stramrood, J., Staring, W., and Hamster, A. (2006). System and method for optimizing throughput of medical evidence data to and from long term digital storage solutions. *US Patent Office*, US 2006/0269106A1

Invited Talks/ Workshops/ Meetings

- 2020 | Global Biotic Interactions: Benefits of Pragmatic Re-use of Species Interaction Datasets, Leibniz Institute for Zoo and Wildlife Research Berlin, January 2020
- 2019 | Global Names and Biodiversity Heritage Library Workshop, University of Illinois at Urbana-Champaign, June 2019
- 2018 | GLOBIS-B Workshop on Essential Biodiversity Variables and Species Interactions, Bari, Italy, February 2018
- 2016 | Practical Hacking On Identifiers at BIOSphere2 (PHOIBOS2), Biosphere2, Oracle, Arizona, February 2016
- 2015 | Unleashing Species Interaction Data, Berkeley Institute for Data Sciences, UC Berkeley, February 2015
- 2014 | NESCent-EOL-BHL Research Sprint, NESCent, Durham, NC, February 2014
- Open Tree of Life Hack-a-thon, University of Michigan, Ann Arbor, MI, September 2014