Independent Biodiversity Informatics/ Software Engineer

400 Perkins St. Apt 104 Oakland, CA 94610 Cell: (415) 217-9805 Email: jhpoelen@xs4all.nl GitHub: github.com/jhpoelen ORCID: 0000-0003-3138-4118

### Education

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

# **Employment**

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

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

Scientific Reports, 9(1)

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 sociotechnical infrastructure and a pragmatic, cross-institutional collaboration. *PeerJ* 

and environmental drivers of trophic ecology in marine fishes - a global perspective.

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

- 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
- 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
- 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
- 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

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*
- 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)

### **Pre-prints**

- Elliott, M., **Poelen, Jorrit H**, and Fortes, J. (2020). Toward reliable biodiversity dataset references
- Gallagher, R., Falster, D. S., Maitner, B., Salguero-Gomez, R., Vandvik, V., Pearse, W., Schneider, F., Kattge, J., Alroy, J., Ankenbrand, M. J., and et al. (2019). The open traits network: Using open science principles to accelerate trait-based science across the tree of life

# 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 Institut for Zoo and Wildlife Research Berlin, January 2020
2019	Global Names and Biodiverity 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 Sciencs, 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

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