

Nick HODGSKIN

Climate Software Engineer

[in linkedin.com/in/nick-hodgskin](https://www.linkedin.com/in/nick-hodgskin) github.com/VeckoTheGecko
Available upon request @ VeckoTheGecko@proton.me



Software Engineer and Open Source Maintainer focusing on scientific software to improve our shared understanding of planet earth. Has a strong background in multidimensional image data (primarily geospatial data). Active member in the Pangeo community and various Scientific Python communities. Maintainer of Xarray, and contributor to various related projects.

COMPETENCES

Programming	Python, Xarray, Icechunk, Zarr, Bash scripting, TypeScript, Rust, Julia
Toolchain	Pixi, git and jujutsu, Conda, uv, Ruff, Pre-commit, VS Code
Operating Systems	Linux, Windows, Mac
Cloud Providers	GitHub Actions, AWS, Google Cloud

PROFESSIONAL EXPERIENCE

Current July 2024	Research Software Engineer, UTRECHT UNIVERSITY + NIOZ, Utrecht, Netherlands > Led development of version 4 of Parcels to be aligned with the Pangeo ecosystem, enabling cross interoperability with other Pangeo packages, effective leveraging of metadata (using CF and SGRID conventions), and ingestion of ARCO data. > Significantly reduced code debt in the Parcels codebase - attracting new contributors to the project, and enabling feature development. > Started the CLAM Community > Re-started and organized a Python talk series at IMAU - Python for Lunch - giving various talks helping scientists in their Python workflows. > Consulted on and contributed to various open source oceanography projects. Python Pangeo Open Source Community Building
Dec 2023 Mar 2023	Data Engineer, UWA OCEANS INSTITUTE, Perth, Australia > Rebuilt the near-real-time (NRT) data system for the ANFOG glider fleet. > Documented legacy systems, identified gaps, and communicated findings to non-technical stakeholders. > Implemented modern IT practices : cloud computing, Git version control, comprehensive documentation, and updated Python standards with the goals of improving extensibility, durability, future-proofing, reducing maintenance effort, and lower data latency. Python AWS
Feb 2022 Nov 2021	Data Science Intern, CSIRO ENERGY, Perth, Australia > Modeled wholesale electricity prices for CSIRO Energy. > Utilized Python for data transformation and model development. > Collaborated with researchers and fellow interns in a multidisciplinary team.
2023 2018	University & High School Mathematics Tutor, UNIVERSITY OF WESTERN AUSTRALIA, Perth, Australia > Delivered >400 tutoring sessions across high-school and university levels. > Taught Python workshops for UWA (2022) - explaining scientific, mathematical, and computational concepts to diverse learners. > Managed student progress, customized learning materials, and fostered engagement.

LANGUAGES

English	● ● ● ● ●
Dutch	● ● ● ○ ○
French	● ● ○ ○ ○

+ KEY COMPETENCIES

- > Software Engineering
- > Teaching and Public Speaking
- > Open source collaboration

EDUCATION

- 2023 First Class Honours in Computer Science - modelling the accumulation of plastic on coastlines in Langrangian Particle tracking simulations.
- 2019 - 2022 Bachelor of Philosophy (Hons) - Mathematics and Data Science

PROJECTS

OPEN SOURCE CONTRIBUTOR

2022 - CURRENT

 github.com/VeckoTheGecko

Open source contributor with volunteer contributions to various different projects, mainly focusing on the Pangeo software ecosystem. Major such contributions including those to Xarray in 2026 (delivering Pixi development workflows, reworking documentation), to Pixi in 2026 (writing documentation pages), and to Parcels in 2022 (reworking CI setup, delivering new documentation website). See GitHub history for more details.

Open Source

CLIMATE TOWN KNOWLEDGE HUB

2022 - CURRENT

 <https://hub.climatetownproductions.com/>

Started the Climate Town Knowledge Hub - a website collating together important climate related resources. Acting as a hub - it connects people to important resources in various different categories related to climate action, breaking down barriers to discovering great initiatives.

Community Building

Open Source

Web Development

REFERENCES

Available upon request.