MY PROFILE

Senior Research Software Engineer and tech leader with 22+ years in software engineering. Across my career I've delivered backend systems, data platforms, DevOps/packaging workflows, and, more recently, ML/RAG and LLVM/compilers work.

I contribute by designing robust systems, applying best practices, improving team collaboration, adopting open-source technologies, and authoring libraries and tools. Polyglot background: I've contributed to projects using Python, C/C++, JavaScript, Java, R, Rust, Bash, PHP, VB6, ASP, ActionScript, etc., and I'm comfortable learning new languages and stacks as needed.

Founder of Open Science Labs; mentor for internships and Google Summer of Code; Advisor at pyOpenSci; Steering Committee member, Open Science Framework - Open Source Community; Independent Researcher affiliated with IGDORE.

SKILLS

Hard skills

- Programming: Arx, Python, C/C++, JS; also Java, R, Rust, Bash, PHP, VB6, ASP, ActionScript.
- Backend & APIs: Django, DRF, Flask; task queues (Celery); packaging & release workflows.
- Data & ML: pandas, scikit-learn; RAG; visualization (Plotly/Bokeh).
- DevOps: Docker; CI/CD (GitHub Actions); Makim, Sugar, Ansible.
- Databases & Search: PostgreSQL; Elasticsearch.
- Compilers: LLVM; ASTx, IRx, Arx.

Soft skills

- Technical leadership; team coaching; code review & standards.
- Mentoring (internships, Google Summer of Code).
- Architecture & strategy; documentation; reproducibility practices.
- Community building; open-source governance (pyOpenSci Advisor; OSF Open Source Community Steering Committee).
- Workshop facilitation & teaching assistant.

Languages

- Portuguese (Native)
- Spanish (Fluent)
- English (Advanced)
- Italian (Basic)

Ivan Ogasawara

Senior RSE, Technical Lead, Instructor & Mentor

EXPERIENCE

Teaching Assistant
WorldQuant University — Applied Data Science Lab   2024–Present

- Support learners in WQU's Applied Data Science Lab.
- Coach students through *eight* end-to-end projects covering data wrangling, visualization, regression/ML pipelines, time series, and database/API access; promote collaboration and use of live office hours.
- Guide Python/pandas and scikit-learn workflows; reinforce SQL / MongoDB / API data access, model evaluation, and clear communication of results.

Instructor — Python Basics & Beyond: Intro to Data Analysis with Python
The GRAPH Courses   2024–Present

- Teach a live bootcamp covering Python foundations, pandas, Plotly, Quarto dashboards, and Git/GitHub.
- Lead weekly workshops and code reviews; mentor projects using industry/research datasets and support capstone/portfolio work.

Teaching Assistant — Generative AI for Work & Research
The GRAPH Courses   2024–Present

- Support an 8-week, hands-on program on no-code AI tools to automate content, research, data analysis, and knowledge-management workflows.
- Facilitate workshops/help sessions on practical tool use (docs / spreadsheets / data automation; literature tools; custom chatbots / RAG); coach capstone projects.

Founder & Executive Director
Open Science Labs   2015–Present

- Built a supportive global community with study groups, resources, events, and contributor pathways.
- Launched Project Incubator & Affiliation program; mentored interns and GSoC contributors across several countries.

Senior Research Software Engineer (Tech & Team Lead)
The GRAPH Network / LiteRev   2023–Present

- Literature-review platform: Python, Django, scikit-learn, pacmap, optuna, hdbscan, bokeh, Celery, Docker, CI/CD.

Senior Research Software Engineer / DevOps
The GRAPH Network / EpiGraphHub   2022–2023

- Delivered trainings on Git, Python tooling, and best practices; defined OSS standards and designed architectures for new services.
- Built and operated platform components (Python, R, CI/CD, Docker, PostgreSQL, Makim, Sugar, Ansible, Nginx, Superset, Airflow); conda packaging.

Software Developer
Quansight / OSBIG   2018–2021

TEACHING, TRAINING & WORKSHOPS

- Mentoring: Open Source projects, Compilers, DevOps, Health Care systems, packaging, CI/CD.
- Training: Python & data science foundations.
- Programs: Internship & GSoC mentorship;
- Events: Conference organization and facilitation.

- Contributed to open-source ecosystems: PyTorch, Ibis (ibis-framework), Jupyter, with Heavy.AI/OmniSciDB.
- Built data applications and services with Django/DRF and Vue.js, using asyncio, Docker, and GraphQL; developed workflows with Argo and Minikube; package distribution with conda stack.

Software Packager
Anaconda, Inc. 2017

- Conda packaging for Python, R, and Java libraries; reproducible builds and dependency pinning.

Research Software Engineer
Fundação para o Desenvimento Científico e Tecnológico em Saúde —2016–2017
Fiotec

- Built portals for visualization and estimation of influenza and dengue incidence in Brazil.
- Stack: Python, JavaScript, pandas, Bokeh, Django/Flask, Fiona, Rasterio, PostgreSQL, MapServer, Docker.

Research Software Engineer
Fapeu — Fundação de Amparo a Pesquisa e Extensão Universitária 2016

- Web system for laboratory analysis of visco-elastic pavement characteristics.

Research Software Engineer
Fapeu — Fundação de Amparo a Pesquisa e Extensão Universitária2013–2016
(Florianópolis, Brazil · Full-time)

- Literature analysis in transportation engineering (WIM, fatigue, complex modulus).
- Implemented DSP/ML/HPC workflows for data processing and modeling.

PUBLICATIONS

- **A Platform for Data-Centric, Continuous Epidemiological Analyses (EpiGraphHub): Descriptive Analysis**. *Journal of Medical Internet Research* (2023). doi:10.2196/40554
- **A Platform for Data-centric, Continuous Epidemiological Analyses**. *medRxiv* (2022). 10.1101/2022.04.19.22274026
- **sourmash v4: A multitool to quickly search, compare, and analyze genomic and metagenomic data sets**. *Journal of Open Source Software* (2024). doi:10.21105/joss.06830
- **python-windrose/windrose: v1.9.0**. *Zenodo* (2023). Record 8029782
- **OpenWIM — Open Science and Weigh in Motion Research (Poster Preprint)**. *engrXiv* (preprint). engrxiv.org/preprint/view/18

EDUCATION

Transportation Engineering — Master's (interrupted)
Universidade Federal de Santa Catarina (UFSC) 2015–2016

Information Technology — Post-Grad (Lato Sensu)
Faculdade Eniac 2004–2005

Database Technology — Associate's Degree
Faculdade Eniac 2003–2004