Bart Olsthoorn

Ph.D. in Physics · Product Engineer at Flower

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Profile

Software engineer with a physics Ph.D., now building product and infrastructure for distributed energy assets: batteries, solar, EVs, heat pumps. Equally comfortable building products, leading a small team, or training a model.

Experience

2023 – now **Flower**
Stockholm · Go, AWS

Feb 2026 – now
Product Owner / Product Engineer · Distributed Assets
Leveraging AI to build our systems while supporting the team on business meetings and prioritisation.

Dec 2024 – Feb 2026
Software Engineer · Distributed Assets
Developed Flower Bridge, the integration API for distributed energy assets: residential and C&I batteries, solar, EVs, heat pumps.

Jan 2024 – Dec 2024
Engineering Manager (interim) · Asset Management
Technical recruiting and team leadership during a growth phase.

Feb 2023 – Jan 2024
Software Engineer · Asset Management
Built a platform supporting the Nordic electrical grid with grid-scale solar and battery systems.

2012 – 2017 **Freelance Software Engineer**
Stockholm, Sweden and Leiden, The Netherlands
Shipped production software across a range of stacks and domains: early generative AI with PyTorch / GANs at *Similar.ai*; Ruby and Elixir work on search, recommendations, and deduplication at *Universal Avenue* (now Velory); scalable Rails SaaS at *InnerBalloons* (acquired by Yext) and web-data systems at *Pointer Brand Protection*.

Education

2018 – 2023 **Ph.D., Physics · KTH Royal Institute of Technology**
Thesis: *Homology and machine learning for materials informatics.* 11 peer-reviewed publications.

2015 – 2018 **M.Sc., Computational Physics · Stockholm University**

Selected publications

2023 **Persistent homology of quantum entanglement**
Physical Review B · Editors' Suggestion · link

2019 **Band gap prediction for large organic crystal structures with machine learning**
Advanced Quantum Technologies · link

Full list on Google Scholar.

Open source

500+ stars across repositories on github.com/bartolsthoorn. Highlights: NVDSP — iOS / macOS audio DSP library (417★); NQS-numpy — neural-network quantum states in NumPy (35★); gohighs — Go bindings for the HiGHS optimizer.

Skills & languages

Core	Go, Python, AWS, Databricks, PostgreSQL, distributed systems, product engineering
Past	Ruby / Rails, Elixir, PyTorch, Swift / Objective-C
Research	Machine learning for materials, topological data analysis, quantum systems
Languages	English, Dutch (native), Swedish (working)