

Katherine Wyers

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Software engineer with 12+ years building and leading delivery of identity and health data systems for refugee populations crossing active borders, clinical research in field settings, and public infrastructure in low-resource contexts, working in PHP, VBA, and VueJS, with distributed team leadership throughout. My PhD research at the University of Oslo examined how large-scale government identity systems exclude marginalised populations by design. I now bring that understanding directly into engineering decisions. Currently rebuilding hands-on depth in Python, React, and Java, evidenced by production contributions to the DHIS2 ecosystem, the world's largest open-source health management information system. Looking for engineering roles in digital public infrastructure, open-source health systems, or humanitarian data platforms where I can work on implementation that takes inclusion seriously at the architectural level.

TECHNICAL SKILLS

Systems Architecture & Delivery (12+ years)	PHP, VBA, Vue.JS: Full-stack development, systems architecture, distributed team leadership
Current Stack	Python (FastAPI, scripting, automation), JavaScript/TypeScript (ReactJS), Java (Spring Boot, Hibernate, REST APIs)
Data & Systems	SQL, PostgreSQL, MySQL, data modelling, identity data management, DHIS2 API & ecosystem, database design, ETL pipelines
Tooling & Ops	Git, Docker, Agile, open-source contribution workflow, CI/CD fundamentals
Domain	Digital public infrastructure, health information systems, refugee & humanitarian data management, inclusive design, intersectionality
Languages	English (native), Dutch (fluent), German (conversational), French (conversational)

PROFESSIONAL EXPERIENCE

Open-Source Software Engineer — *DHIS2 Ecosystem: Climate Data App, Data Quality Workbench, (Apr 2026 - Present)*

- Contributing production code to the DHIS2 ecosystem, the world's largest open-source health management information system deployed across 80 LMICs and serving 3 billion people.
- Building features in the DHIS2 Climate Data App (ReactJS) and the Data Quality Workbench (Python)
- Currently scoping contributions to the DHIS2 ecosystem with a focus on identity data and civil registry integration, the part of the infrastructure where exclusion is most consequential

Doctoral Researcher - Digital Identity and Public Infrastructure — *University of Oslo, Department of Informatics, (Sep 2021 - Nov 2025)*

- Completed a 4.5-year research project on how large-scale digital transformation of government identity systems can be designed without excluding marginalised populations from public service

- Taught Python and React at master's level to health informatics and software engineering students
- Led two cross-institutional research teams; published on digital identity and LGBTQ+ populations in government digital infrastructure
- Awarded Best Paper at the Scandinavian Conference on Information Systems 2025 for research on intersectionality and digital public infrastructure

Engineering Technical Consultant — UNESCO/OpenEMIS (South Africa), (May 2021 - Aug 2021)

- Designed and delivered technical training for a distributed engineering team deploying an open-source education management system at national scale across the Eastern Cape of South Africa, ensuring the in-country team could own and extend the system independently

Senior Software Engineer - Humanitarian Data Systems — M-FUND Migrant Health

(Thailand/Myanmar), (Oct 2019 - Apr 2021)

- Architected and built identity data management systems for refugees and internally displaced people on the Thailand-Myanmar border, one of the most operationally complex identity contexts that exist. Records had to remain consistent, auditable, and recoverable across border crossings and gaps in connectivity for populations who often had no other form of documented identity. Designed data models for cross-border interoperability and led a distributed engineering team through the full delivery lifecycle, from requirements through production deployment.

Senior Software Engineer - Health Data Systems — Shoklo Malaria Research Unit (Thailand), (Jul 2018

- Sep 2019)

- Designed and built internal clinical data systems supporting active epidemiological research on the Thailand-Myanmar border, a data-intensive field research context
- Managed the in-house software development team, responsible for the reliability and performance of systems underpinning published clinical research

Refugee Data Management Consultant — World Education/Save The Children (Thailand/Myanmar),

(Mar 2017 - Jul 2018)

- Delivered data management solutions for education, health, and identity management for refugee and displaced populations under USAID and EC-funded programmes

Founder, CEO, and Technical Lead — MelodyCollege.com, (Nov 2013 - Feb 2017)

- Founded and built a gamified eLearning platform from scratch as sole developer and product lead, grew to a global user base across nine countries

EDUCATION

PhD Informatics — University of Oslo, (Sep 2021 - Nov 2025)

Digital Public Infrastructure, Identity Data Systems

MSc Software Engineering — University of Hertfordshire, (Sep 2017 - Jul 2019)

Board of Examiners Award: Outstanding Distinction

Core: Java, PHP, Agile, Scrum, Database Design, Software Testing

MA (Res) Music Composition — Waterford Institute of Technology, (Sep 2009 - Jul 2011)

Algorithmic composition using generative systems