



Patrick Okwir

Toronto, ON

career@okwir.com | Cell. 438.345.3921 | Github: pokwir | LinkedIn: in/pokwir | Website: okwir.com

Career Summary

An adept data scientist and analytics professional with a decade of experience managing metrics and optimization systems, research, impact investment, and performance measurement. Presents an integrated skillset in project management and assessment, data science, analytics, capacity building, consulting, and business leadership.

Areas of Expertise

- Machine Learning Research
- Natural Language Processing
- Database Management (ETL)
- Process optimization
- Statistical Modeling
- Data Visualization
- Data Wrangling, Cleaning, Tidying
- Knowledge translation
- Deep Learning
- Quantitative & qualitative analytics
- APIs (REST)
- Time series analysis
- Web scraping
- Deployment
- Information products — reports, presentations, briefs

Data Science Tools

- **Programming languages:** SQL, Python, R, VBA scripting, CSS, JavaScript, HTML.
- **Platforms:** AWS, Docker, SAP, Google Compute, Amazon E2C, MongoDB, PySpark, Excel, SPSS, Scikit-learn, Tensorflow hub, PyTorch, Hugging Face, Azure Data Studio, PgAdmin, SQLite.
- **Specialization:** Database management, inference, natural language processing, machine learning, predictive and prescriptive analytics.

Recent Projects

- **PowerPlay Dashboard.** *Responsive and interactive JavaScript admin data dashboard.* **July 2023**
Tools: SQL, Python, R, JavaScript, HTML, CSS, Flask, Docker. **Link:** [Here](#).
- **Ted-talks recommender engine and chatbot service.** *Natural Language Processing.* **July 2023**
Tools: SQL, Python, JavaScript, HTML, CSS, Hugging Face, Tensor-flow hub. **Link:** [Here](#).
- **Used car price predictor.** *Supervised Machine Learning.* **June 2023**
Tools: Amazon E2C, SQL, Python, JavaScript, HTML, CSS, Scikit-learn. **Link:** [Here](#).

Professional Experience

PowerPlay NYC. Brooklyn, New York.

2018 — Present

PowerPlay empowers young women, girls, and gender non-conforming youth through sports, promoting healthy habits and supporting them to become physically and mentally healthier.

Data and Evaluation Manager

- **Led and developed** data acquisition, cleaning, processing, feature engineering, and storage pipelines for tracking and enriching participants, donations, and marketing data.
- **Supervised a team of 6 to develop an organization-wide data and analytics pipeline** — refined measurement tools, collected and analyzed over 40,000 participant surveys. Produced information products and trained and mentored 36 program staff.
- **Implemented data and metrics advisory and technical support to 10 consortium organizations** — led research, reporting, and engagement of mission-based program partners and donors to utilize data to drive internal efficiencies.
- **Strengthened consortium capacity to retain \$5.2M Federal and City Council funding** — curated monitoring systems and tools, tracked performance, produced technical reports, cultivated innovative analytics practices, and supported fundraising.

Global Health Corps. Kampala, Uganda.

2017 — 2018

An NYC-based non-profit focused on global health equity and social justice in Eastern and Southern Africa.

Data, Evaluation, and Grants Officer

- **Bolstered development and implementation of a national metrics framework for 32 global health partners** — charted performance indicators, collected and analyzed program and capacity-building data, and crafted performance improvement plans.
- **Improved program efficiency and effectiveness** — independently developed and launched an online automated mobile data collection, analytics, and dashboard platform.
- **Successfully negotiated a complex system for data and analytics capacity building** — championing an infrastructure that assists in collecting and managing research data across organizations and supporting the Business Intelligence Unit.

Service Learning

United Nations Global Pulse. Manhattan, New York.

2018 — 2019

A UN Secretary-General's initiative on big data and AI for development, humanitarian action, and peace.

Research Fellow

- **Conducted quantitative and qualitative analysis** linked to early identification and investigation of potential health hazards to prescribe public health control measures.
- **Produced weekly and monthly reports** on key trends related to epidemic intelligence.

Education

Masters in Health Evaluation. *University of Waterloo*

In Progress

Diploma in Data Science. *Lighthouse Labs.*

2023

Bachelor of Environmental Health Science, Public Health major.

2014

Professional Courses

- **Azure Data Scientist Associate DP-100** — Microsoft **2023**
- **Data Science Certificate** (Inference, NLP, Machine Learning) — Codecademy **2018**
- **Certificate in Statistics** — University of California, Berkeley **2013**