

Christopher Dare

CMU '21 grad with 5 years of fintech experience building consumer and enterprise products as an analyst, engineer and product manager. Great writer and communicator. Built an AI fraud detection system for Rwanda's Revenue Authority. Seeking to apply my leadership and engineering skills to create data-driven solutions within a high performing team.

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EXPERIENCE

Clearspace Labs, Accra (Ghana) — *Senior Product Development Manager*

MARCH 2021 - PRESENT

Leading (hands-on) a cross-functional team of engineers and designers to build a globally competitive medication record system based on [FHIR](#) with over 130K users.

- Developed requirements, specifications, architecture and test cases for features (onboarding, billing and payments, COVID-19 testing, intelligent error detection)
- Firmed up team structure, culture, process and communication systems. This resulted in improved testing, fault tolerance, build quality and time to release

Carnegie Mellon University, Remote — *Graduate Student Researcher*

OCTOBER 2020 - JANUARY 2021

Collaborated with [Prof. Rita Singh](#) and 3 coursemates from my [deep learning course](#) to generate and evaluate the world's first set of limericks generated by artificial intelligence. Our results were featured on CMU's website from Feb 15 - 20. Project video available [here](#)

- Developed a metric for scoring and improving poems based on rhyming
- Generated poems available at <https://www.amazon.com/dp/B08TV36KF7>
- Others: Built an autograd deep learning toolkit akin to [PyTorch](#). Implemented MLPs, CNNs, and RNNs. Toolkit available on [request](#)

Rwanda Revenue Authority, Kigali (Rwanda) — *Data Scientist (intern)*

MAY 2020 - AUGUST 2020

ML for fraud detection in international trade: Prototyped an ML scoring system as a replacement for a rule-based selectivity model for identifying fraudulent consignments

Objectives: Facilitating trade and increasing revenue gains

Model performance: 90% precision, 95% recall

My contributions:

- Conducted exploratory data analysis with the team and identified useful features
- Co-wrote functions for ETL and model fitting with pipelines
- Created a cli to train, review and save ML model updates + evaluation reports
- Created an ML REST API to determine the appropriate classification channel for a given declared consignment in compliance with WTO standards. Demonstrated ease of integration to the RRA's existing applications via a streamlit app demo
- **Other notes:**
Significant packages used: [pandas](#), [sklearn](#), [fastapi](#), [streamlit](#), [poetry](#), [joblib](#),

SKILLS

- [Data science](#)
- [Machine learning](#)
- [API development](#)
- [Writing](#)
- Software design
- Customer & market discovery
- Object oriented programming
- Listening and user empathy
- Speaking & presentation

TECH TOOLKIT

- **Data science**
Numpy, pandas, scikit-learn, joblib, typer, pytorch, tensorflow, spacy, nltk...
- **Web and API development**
Djangorest, FastAPI, Postman
- **Programming**
Python (expert)
SQL (intermediate)
C++ (familiar)
- **Presentation / UX**
Google slides (expert)
Adobe XD (familiar)
- **Project, Devops, Cloud**
Docker
Git: Gitlab, Github

[typer](#), rra-data (custom database package)
TDD, Gitlab, software architecting with UML & C4

Digital Ocean, AWS
COURSES

Inflexion Capital, Accra (Ghana) — *Technology Analyst*

JULY 2017 - MAY 2019

Contributed to the success of a series of projects in partnership with [IC Asset Managers](#) and [IC Securities](#) on internal projects and [MTN Ghana's IPO](#):

- Identified opportunities for automation and architected software to replace human efforts in areas such as financial statement imports, trade settlements, and quarterly reporting to fiduciaries. Saved the firm \$24K+ in hiring costs
- Co-wrote a corporate investment portal to abstracts operational procedures from fund managers
- Designed and managed the development of a [trustee portal](#) to provide secure information search and retrieval for fund trustees
- Devised solution architecture for a retail investment fund product with management. Projected to allow the firm to manage over \$100mn more in assets
- Performed user testing on software updates during MTN Ghana IPO share offer
- Analyzed and automated processing and synchronization of text and image data from 90,000+ IPO subscribers
- Wrote SLA technical, policy documentation for the IPO underwriter (IC Securities)
- Ran and completed financial reconciliations for all IPO USSD subscriptions
- Delivered a presentation to a corporate client on 2017 Q3 fund performance and 2017 Q4 outlook

EDUCATION

Carnegie Mellon University Africa, Rwanda — *Ms. Information Technology (CIT scholar, applied machine learning major)*

JULY 2019 - JUNE 2021

Moderator: Facilitated a series of guest lectures on AI/ML with experts from Netflix and Microsoft

Valley View University, Ghana — *Bsc. Computer Science*

SEPTEMBER 2013 - JULY 2017

President and Senator, Computing Science Students' Association (2016-2017)

Admitted to the [SEO Africa](#) internship program at Inflexion Capital

PUBLIC PROJECTS (TITLES ARE HYPERLINKED)

Serenity — Easy access to world-class healthcare from anywhere

AiBBA — Evaluating and improving poetry generation by GPT-2

Firelord — A tutorial for creating machine learning apps from scratch

Novi — Messaging for family and people of close relation (alpha release)

- Strategic use of digital information in enterprises
- Privacy, policy, law and technology
- Data structures and algorithms
- Artificial neural networks
- Deep learning
- Speech signal processing
- Natural language processing
- Research methods
- Intro to HCI
- Information security

VOLUNTEER WORK

- **Moderator**
[Fireside chat with H.E Paul Kagame](#), President of Rwanda
- **Facilitator**, rural outreaches to support 200+ children in Ghana
- **Analyst & API developer**, [Novi](#)

AWARDS AND PROGRAMS

- **Best behaved student** (Valley View University)
- **Secure and Private AI Scholar**, Udacity
- **SEO Africa** internship program

LANGUAGES

- **English** (Advanced)
- **Akan** (Basic)
- **French** (Basic reading proficiency)