Kasole Nyembo, CFA

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### Summary

* I specialize in applying AI-driven modelling and machine learning to improve policy and program delivery, enabling decision-makers to assess risks, and make data-backed strategic decisions with greater speed and accuracy.
* Extensive experience in alternative financing, including managing $200M+ in P3 contracts, advising on Canada-backed Indigenous bonds, and launching of a multi-billion-dollar blended finance program at Global Affairs Canada—mobilizing private investment, expanding development policy reach, and accelerating infrastructure delivery in emerging markets.
* Beyond analytics, I am committed to innovative communication—authoring an [illustrated economics poetry book](https://www.amazon.ca/EconBook-Poetic-Journey-Through-Economics/dp/106920580X/ref=sr_1_6?crid=2V1GLMJ28487Y&dib=eyJ2IjoiMSJ9.-tcePYPq9DT55MTy1hWF7A.RDkroHYV4WN0Fys_x5lQHkUijdyNYl1KNeS9Dr9F8fU&dib_tag=se&keywords=econbook&qid=1754194149&sprefix=econbook%2Caps%2C327&sr=8-6) to make complex concepts accessible and creating an [AI-powered NGO funding platform](https://intergrant.streamlit.app/) that improves how organizations identify and secure financial resources.

### Core skills

* Analytical Expertise – Strong record in applying AI and advanced modelling to solve complex policy, financing, and economic challenges.
* Global Financing – Led P3s, energy retrofits, and multi-billion-dollar development programs at Global Affairs Canada.
* Economic Insight – Extensive experience in financial viability analysis, risk assessment, and macroeconomic policy evaluation.
* Multilingual – English & French (native), Spanish & Swahili (working).

### Education

**Chartered Financial Analyst (CFA)**

The CFA designation is a globally recognized, rigorous and comprehensive program in the field of investment management and research analysis.

**M.A. in Economics** (2007-2008)

McMaster University, Hamilton, ON

### Work History

**Team Lead, Reproducible Analytics** (2024-2025)

Housing, Infrastructure and Communities Canada, Montreal, Quebec

* Leads the department’s analytics strategy, delivering scalable solutions that modernize program delivery, maximize the value of quantitative and qualitative data, and align with priorities.
* Oversee the creation of end-to-end AI-powered systems—from automated data ingestion pipelines to advanced analytics platforms—that improve operational efficiency, decision-making, and service delivery.
* Champions the deployment of a Generative AI chatbot trained on internal departmental data, enabling staff to quickly retrieve accurate, context-specific information, reduce time spent on manual searches, and ensure consistent application of policies and procedures.

*Highlight*

* Led HICC to the finals of the government-wide Data Challenge by developing a predictive AI model for homeless shelters, forecasting bed utilization to help prepare for demand surges.
* Delivered AI and automation solutions that have saved thousands of person-days for both internal and external stakeholders, significantly improving efficiency and service delivery.

**Senior Analyst, Innovative Grants and Contributions** (2022-2023)

Government of Canada, Global Affairs Canada, Ottawa, Ontario

* Managed the blended finance component of the Conditionally Repayable Contribution pilot, assessing financial viability, reviewing business cases, preparing Term Sheets for negotiations, and drafting innovative financing terms.
* Provided policy advice on multi-billion-dollar Unconditionally and Conditionally Repayable Contributions and Sovereign Loan Programs, bridging traditional and development finance, including guidance on Limited Partnerships which are common in investment markets but new to development finance

*Highlight*

* Closed the first project under the Conditionally Repayable Contributions Pilot, delivering highly concessional business loans via local banks in Benin and Burkina Faso. This landmark initiative introduced Blended Finance at Global Affairs Canada, leveraging development funding to attract and support private-sector investments.

**Senior Analyst, Indigenous Relations and Navigation Protection** (2021-2022)

Government of Canada, Transport Canada, Ottawa, Ontario

* Led the development of the Five-Year Strategic Plan to advance Reconciliation with Indigenous Peoples and remove navigation barriers on Canada’s waterways.
* Designed an internal communication plan to improve coordination between the Director General’s Office and regional Directorates in a remote work environment.

*Highlight*

* Facilitated a national working group with managers across headquarters and regions, synthesizing diverse perspectives into a unified Strategic Plan within tight timelines while managing differing priorities and work styles.

**Founder and Chief Executive** (2018-2021)

5minofscience, Ottawa, Ontario

* Led an international team to build a global video platform connecting academics and industry, driving research collaboration across North America and Africa.
* Oversaw platform development, marketing, content production, and strategic partnerships with leading research, innovation, and technology organizations.

*Highlight*

* Presented 5minofscience at the Asia-Pacific Economic Cooperation Chief Scientists’ Conference in Brisbane, Australia.
* Secured a UNDP grant for a pilot program showcasing agronomy researchers in the Democratic Republic of Congo.

**Project Manager, Public Private Partnerships** (2016-2018)

Government of Canada, Department of National Defence, Ottawa, Ontario

* Developed and implemented innovative financing models for Defence infrastructure, including P3s and Energy Contracts.
* Built strong relationships with base commanders and municipal leaders to align infrastructure solutions with operational needs.

*Highlight*

* Initiated a $200 million P3 agreement for a housing complex at CFB Borden, doubling as a hotel in low-demand periods.
* Lead negotiator for major infrastructure projects with the City of St. Jean-sur-Richelieu.

**Economist** (2015)

Government of Canada, Indigenous and Northern Affairs Canada, Ottawa, Ontario

[Recruited to National Defence by my former manager for proven results]

* Developed innovative financing solutions for First Nations communities, including mortgages aligned with Indigenous values and First Nations bonds, to expand access to capital without relying solely on federal funding.

*Highlight*

* Partnered with TransUnion to design a system allowing rent payments to build credit history, enabling residents of reserves to qualify for mortgages and business financing.

**Economist – Financial Sector Branch / Quantitative Analyst – Tax Policy Branch** (2008-2013)

Government of Canada, Department of Finance, Ottawa, Ontario

* Conducted macroeconomic modelling, econometric analysis, and policy simulations to assess the economic and fiscal impact of proposed tax measures, as well as mergers, acquisitions, and restructuring in the banking and insurance sectors.
* Produced quarterly reports on Canada’s largest financial institutions, identifying emerging risks, market trends, and policy implications.
* Built and maintained forecasting and simulation models (SAS, STATA, Excel) to support evidence-based decision-making.

*Highlight*

* Developed a national tax calculator to model marginal and average tax rates across provinces, contributing to the Home Renovation Tax Credit and tax reforms on dividends and capital gains.
* Created a “Big Picture” section in quarterly reports to flag systemic risks, such as proprietary trading exposure and the impact of low interest rates, and delivered high-level briefings on the S&P ratings system and global banking structures.