



# Nsukami Patrick

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[Blog](#) · [Mastodon](#) · [Code](#)

Python software engineer with 15+ years of experience building backend systems, REST APIs, and data pipelines. Passionate about [free and open source software](#), with hands-on devops experience spanning containers, CI/CD, and system administration. Active instructor and public speaker — committed to giving back through teaching and open source contributions.

## ME :

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**Operating systems** - GNU/Linux Debian, Ubuntu & derivatives), Fedora, WSL2

**Programming languages** - [Python](#), Bash, SQL, Lisp

**Databases** - Sqlite, Postgresql, DuckDb, Redis

**Software development methodologies** - Agile, Kanban, Pair programming, Devops, Lean

**Frameworks & Libraries** - [Flask](#), [Django](#), Sqlite, SQLAlchemy, [Mypy](#), [Numpy](#), [Pandas](#), [Streamlit](#)

**Toolbelt** - Emacs, SSH, [Gitlab-CI](#), [Pytest](#) Git, Make, [AWS](#), [K8s](#) & [more](#)

**Spoken languages** - French (native), Lingala (native), English (fluent)

**Hobbies** - Reading, Writing, Journaling, Cooking, Jump rope-ing, Kettlebell-ing, Swimming

## EXPERIENCE :

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### **Institut Pasteur Dakar**

*Software engineer*

August 2023 - Present

*Dakar Senegal*

- Developed REST APIs for the latest iteration of [4s](#), a syndromic surveillance system that monitors symptom clusters to enable early and faster detection of epidemics and public health events through real-time data analysis.
- Developed REST APIs to streamline data retrieval from 96-well PCR plates (ELISA assays) for the immunology laboratory, implemented patient data mapping systems, and created comprehensive data processing solutions including visualizations, reports, and analytical tables.

### **Dakar Institute of Technology**

*Programming instructor*

Oct 2019 - Present

*Dakar Senegal*

- Contributing to building one of the foremost programming [schools](#) in West Africa.
- Designed and developed engaging curriculum [materials](#) tailored to learners with different skill levels.
- Delivered instruction to 200+ scholars from diverse backgrounds across Africa.
- Taught 30+ courses focused on Python programming, databases, version control, unit testing, and REST APIs.
- Assessed student progress through assignments, exams, workshops, and personal projects.
- Organized industry visits to enhance students' understanding of real-world applications.
- Supported students with internship and [job placement](#), in Senegal and Guinea.

### **Logilab**

*Software engineer*

Oct 2018 - Oct 2021

*Remote*

- Updated and refreshed the technical documentation for the RQL package.
- Co-authored and reviewed [training](#) materials (courses & exercises) offered by Logilab.
- Conducted weekly pair programming and code review sessions with teammates.
- Led the addition of Python [type annotations](#) to the [RQL package](#).
- Reviewed and migrated internal software components to Python 3 ahead of the [Python 2 sunseting](#).

**Brief.me**

Feb 2018 – June 2018

*Software engineer**Remote*

- Authored technical documentation and delivered training to end users.
- Integrated payment gateways into the web platforms.
- Optimized back office performance by reducing database query counts and extracting only required fields.
- Maintained and extended the [brief.me](#) & [brief.eco](#) platforms.
- Administered web servers and SSL certificates, and set up monitoring.
- Configured continuous deployment pipelines for all internal projects.

**XCG Consulting**

Feb 2017 – Jan 2018

*Software engineer**Remote*

- Provided technical support and assistance to end users.
- Designed and implemented feature experiments across the [main Django projects](#).
- Containerized Django applications using Docker to simplify and accelerate deployment.
- Integrated multiple third-party services (payment gateway, currency rates, monitoring) into in-house Django projects.

**Africafilms.tv**

2011 – 2016

*Software engineer**Remote*

- Developed and maintained the movie catalog system for an innovative Video on Demand platform focused on African cinema.
- Implemented Digital Rights Management (DRM) to protect content across the platform.
- Integrated payment gateways for purchases and subscriptions.
- Built the financial distribution engine handling revenue splitting among stakeholders.

**FREE AND OPEN SOURCE SOFTWARE CONTRIBUTIONS**

**I think**, the ability to access, modify, and distribute software freely not only fosters innovation but also promotes collaboration and knowledge sharing within the community. **I also think**, whenever I can, I should contribute back to free and open source software. The following are some of the contributions I have done :

- Improved type annotations for some methods inside the [Pandas stubs](#) repository.
- Added translations and attempted to update Github Actions to run even more tests for the [Piccolo admin](#) project
- Added some stubs inside the [Typeshed](#) repository
- Fixed some bugs for the [Healthsites.io](#) project.

**EDUCATION**

Institut Supérieur d'Informatique (ISI) <a href="#">Master in software engineering</a> , BAC+5	Dakar, Sénégal 2010
Institut des Sciences de L'Ingénieur (ISCI) <a href="#">Bachelor in informatics</a> , BAC+3	Dakar, Sénégal 2008
Centre d'Entrepreneuriat et de Développement Technique, CEDT le G15 <a href="#">Certificate of Advanced Technician</a> , BAC+2	Dakar, Sénégal 2007
Lycée Technique National Omar Bongo <a href="#">Baccalauréat, série E</a> , BAC	Libreville Gabon 2004

*"Les espèces qui cessent d'apprendre et de s'adapter disparaissent." Thomas L. Friedman.*