# Felix Hirwa Nshuti

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# **SUMMARY**

Passionate Computer engineer with a strong background in Deep learning, computer vision, and natural language processing. Skilled in Python, Jax, PyTorch, ivy, and various ML libraries. Excellent open source contribution and community interaction and currently in early research career. My interests lie most in Operating Systems, Systems Programming, Programming Languages and Compilers, and Machine Learning. Seeking challenging role to develop optimal and cutting-edge technologies.

## **SKILLS**

Programming Languages: Python, C/C++, ARM Assembly, CUDA, SQL, Java

Deep Learning Frameworks: PyTorch, Jax, TensorFlow, Paddle, Ivy

Libraries & Tools: NumPy, Pandas, Scikit-learn, OpenCV, NLTK, Git/GitHub, Docker

Natural Languages: English (fluent), Kinyarwanda (Proficient)

# **PROJECTS**

#### Scaling Deep learning backends with sktime

Machine Learning with time Series

May 2024 – Aug 2024 Python, PyTorch, TensorFlow, Darts, CI/CD

- · Submitted under the Google Summer of Code, sktime
- Project Link
- · Added new classification models to sktime using PyTorch (GRU and GRU-FCNN Classifiers)
- · Helped in migration of MCNN classifier from sktime-dl to sktime main repository
- · Added integration for darts regression models adapter.

#### EXPERIENCE

#### **Community Council Member**

Sktime

Sktime

Oct 2024 – Present Remote, Remote

- · Involving in decision making for Roadmaps.
- · Participating in mentorship program as a mentor.
- · Community Leadership.

#### **Core Developer**

Sep 2024 – Present Remote, Remote

· Maintaining sktime, pytorch-forecasting, and other related projects.

· Research and Implementing new algorithms.

**Contributor** Google Summer of Code, sktime May 2024 – Aug 2024 Remote, Remote

- Contributed to sktime a unified ML library for Time Series(Under Google Summer of Code)
- · Scaled Deep Learning backends with sktime, mostly worked with Darts and PyTorch
- Implemented an adapter for darts regression models in sktime.
- Presented my project progress at weekly mentorship meetings
- · Community engagement through sprints and discord chats.

#### **Machine Learning Engineer**

Unify

- Maintained and developed the Ivy(A unified Deep Learning framework).
- · Led on the conformity of the Array API standard with Ivy.

June 2023 – October 2023 London, United Kingdom

- · Led and Maintained the Numpy Frontend of Ivy.
- · Community engagement and providing mentorship to contributors.

#### **Machine Learning Engineer Intern**

Unify

- Maintained and developed the Ivy(A unified Deep Learning framework).
- · Researched and worked on adding features to Ivy.
- Presented my research findings at weekly meetups with my supervisor.
- · Community engagement through a reading group.

#### **Volunteeting Developer**

Unify

• Contributed to Ivy a Unified Deep Learning Library.

July 2022 – September 2022 London, United Kingdom

September 2022 - June 2023

London, United Kingdom

### **Apprentice Software Developer**

April 2021 – May 2021

Rohde & Schwarz

Kigali, Rwanda

- Developed Cybersecurity test software by using some automation libraries of Python like Selenium.
- Helped the team in following agile methodologies to deliver quality software over time.
- Presented the final product to the customer and delivered the product to production.

## VOLUNTEERING

Mentor

August 2021 – April 2023 California, United States

DeepLearning.AI

Assisted Learners taking the TensorFlow Developer Professional Certificate on Coursera.

Mentor

September 2021 - October 2021

AI Planet

Remote, Remote

- Facilitated learners who were taking the Data Science Mini Bootcamp Series from Al Planet(formerly DPhi).
- · Created learning assignments for the Python course.
- · Helped the team to give feedback to learners.

Co-Mentor

April 2023 - August 2023

Google Summer of code

Remote, Remote

Co-assisted the mentorship of 2023 GSOC contributors working on ivy (https://github.com/ivy-llc/ivy).

## **EDUCATION**

Pandit Deendaval Energy University

Bachelor of Technology in Computer Engineering

Gujarat, India

October 2021 - June 2025

**Integrated Polytechnic Regional College Kigali** 

Kigali, Rwanda

Dropout: Advanced Diploma in Biomedical Equipments Technology

October 2018 - January 2021