# **Jonas Ngnawe**

3084, Av. d'Amours, QC, G1X 1L5

ngnawejonas@gmail.com https://www.linkedin.com/in/jonasngnawe

Tel: (418) 261-8177

#### **STUDIES**

#### **PhD in Computer Science**

2021 - (Ongoing)

Mila and Intelligence and Data Institute (IID), Laval University, Quebec Adversarial Robustness, Distribution Shifts and Uncertainty of Deep Learning Models Check out my work at Jonas Ngnawé - Google Scholar

# **Master in Machine Learning**

2018-2019

AIMS African Master's of Machine Intelligence, Kigali, Rwanda

Taught by international experts, a Master's program funded by Facebook and Google, <u>Link Complete list of courses</u> (Fundamentals, Vision, NLP etc.)

Project: Scalable Inference with Distributed Gaussian Processes using the Wasserstein Barycenter.

#### **Master in Mathematical Sciences**

2016-2017

African Institute for Mathematical Sciences, Limbe, Cameroon

<u>Project</u>: k-Clustering Problem-Application to a Field Technician Allocation Optimization Problem.

# **Engineer's Degree in Computer Science**

2011-2016

Ecole Polytechnique Yaoundé, Cameroon

Other: Machine Learning Summer School (MLSS), London 2019

#### PROFESSIONAL EXPERIENCE

#### **Google AI resident**

Oct 2019- Sep 2021

Google Brain Team Accra, Ghana

- Development of robust methods for deep neural networks
- Compression of deep neural networks by quantization and pruning

<u>Tools, Languages and Methods:</u> Python/Tensorflow 2.0, Google Cloud Platform (GCP)

<u>Publication: Robustmix: Improving Robustness by Regularizing the Frequency Bias of Deep Networks.</u> Accepted at NeurIPS 2022 Workshop on Distribution Shifts: Connecting Methods and Applications.

# **Software Developer Engineer Internship**

Feb-August 2016

Bolloré Africa Logistics, Port of Douala, Cameroon

- Automation and Analysis of the Review of Access Rights to the Information System
- Detection of abnormal access rights

<u>Tools, Languages and Methods:</u> Talend Open Studio, Qlikview, C#, ASP.Net, Microsoft SQL Server, Visual Studio, UML/Merise, BPMN 2.0, PMI Methodology

# **Computer engineer**

Jan - Aug 2018

GroupOne Holding Company, Limbe, Cameroun

- Website development
- Fuel consumption prediction projects
- Studies for the creation of a startup incubator (Business plan)

- Industrial Maintenance (Refinery) of the Honeywell Experion System
- IT Support

<u>Tools, Languages and Methods:</u> HTML5/CSS3/JavaScript/JQuery/JQueryUI/Ajax/PHP, MySQL, Méthodologie PMI, Business Model Canvas

## **Freelance Software Developer**

2017-2018

- Digitization of administrative procedures for various ministries in Cameroon,
- Development and maintenance of WordPress plugins (WooCommerce)

<u>Tools, Languages and Methods:</u> Electronic Document Management (EDM)/Electronic Archiving(<u>MARCH RM</u>), PHP/Woocommerce, MySQL Workbench, Microsoft Access, Git/Gitlab/Github, Java, Netbeans, SCRUM

## **ADDITIONAL SKILLS**

Data Science/AI

Pytorch, Scikit-Learn, Pandas, Weight&Biases, Matlab, Octave, Docker etc.

#### **ACTIVITIES**

Keynote speaker at **Deep Learning IndabaX-Cameroon**: Robustness in Al.

Dec. 27, 2022

**Organizing committee member of** <u>Interpolate workshop @Neurips2022</u>: First Workshop on Interpolation Regularizers and Beyond.

Founding member of Kmer-AI, an association for the promotion and vulgarization of AI and Machine Learning in Cameroon.

Since 2020

Co-organizer of a Machine Learning Projects Competition (MLPC)

Since 2020

Polytechnique Yaoundé

Co-organizer of a two (02) week introductory course in Machine Learning

September 2019

Polytechnique Yaoundé

Co-organizer of the first Deep Learning IndabaX Rwanda, a conference on Machine Learning and AI

April 2019, Kigali, Rwanda

Reviews: Algorithmic Fairness through the Lens of Causality and Privacy (2022), Montreal Al Symposium, Black in Al Workshop @NeurIPS, Deep Learning Indaba (2022, 2023, 2024)