+49 15236952268
se.israel.abebe@gmail.com
iazime@aimsammi.org
Saarbruken, Germany

israelabebe.github.io
GitHub: IsraelAbebe
LinkedIn: israel-abebe

Israel A. Azime
Senior Machine Learning Engineer | Programmer

EDUCATION

Preparatory Phase Doctoral Studies - HPC in AI September 2022 – Present
Universität des Saarlandes - Computer Graphics Lab *Saarbrücken, Germany*

 Advisor: Prof. Dr.-Ing. Philipp Slusallek and Prof. Dr. Dietrich Klakow

Master of Science, Mathematical Sciences – Machine Intelligence October 2019 – March 2021
African Institute for Mathematical Sciences *Ghana, Accra*

*Worked on Exploring Data Imbalance and Modality Bias in Hateful Memes with
my supervisor Marcus Rohrbach for my final research thesis. In the project I achieved
+8% and +1% improvement on accuracy and f1 score respectively.*

Bachelor of Science, Software Engineering September 2012 – December 2017
Addis Ababa Universty *Addis Ababa, Ethiopia*

Graduation Project: *Amharic online handwriting recognition keyboard.*

WORK EXPERIENCE

Research Assistant **September 2022 – Present**
Universität des Saarlandes, *Saarbrücken, Germany*

- Multimodal learning, High performance computing, AI/ML
- Cooperate with the other members of German national high performance computing network
  to prepare HPC related training and support.

Applied Research Data Scientist **March 2021 – October 2021**
iQuartic, New Wave *Maryland, USA (Remote)*

- *Collaborated with a team of data scientists on AI solutions for automated risk adjustment, leading
  the transition of the data science pipeline from paid to in-house solutions, resulting in annual cost
  savings of 400k USD.*
- Developed and contributed to various projects in **medical OCR**, **medical spell checker**, **visit recognition**,
  and **ICD code extraction**. This included working on pipelines for ***data collection, model building, deployment
  and testing***.

Applied ML Developer **June 2017 – August 2022**
SingularityNet, Icog-Labs Software Consultancy *Addis Ababa, Ethiopia*

- **NuNet Fake News Detection** : *Implemented fake news detection and classification models with 97% accuracy link*
- **Web Page Recommendation** : *Built web page recommender system using Doc2Vec similarity and DeepCTR approach.*
- **Image Retrieval Network** : *Developed Image retrieval network on 50 GB Google open images dataset.*
- **Holistic Edge Detection** : *Integrated a holistically-nested edge detection model.*
- **People Analytic Service** : *Predicting behaviors and attributes from organizational slack communication graph.*
- **Network Analytic Service** : *Providing graphs and network processing functions as a service.*
- **Plant Disease Recognition** : *Achieved 98% accuracy on plant disease detection networks and experiment with GANs.*

Internship - Junior Programmer **Jan 2015 – May 2017**
Icog-Labs Software Consultancy *Addis Ababa, Ethiopia*

- (**YANETU**) - AI-based teaching assistant for children and successfully launched a crowdfunding campaign
  on Indiegogo to support the project's development and distribution.

SKILLS

Ml Libraries and Frame works	Python, PyTorch, Tensorflow, SciPy, NumPy, Pandas, ApacheSpark, Docker
ML Concepts	Deep Learning, Computer Vision, Natural Language Processing, Multimodal Learning
Programming	Python, Java, C#, Web Dev(HTML, CSS, JS), C/C++ (academic experience)
Soft skills	Project Management, Teamwork, Mentoring, Public Speaking, Story Telling, Writing
Language	Amharic(Native), English(fluent speaker), German (A1.1)

CERTIFICATIONS

Certification Of Recognition For Outstanding Graduation Project - link
Mathematics for machine learning: linear algebra - link
Software processes and agile practices - link
Introduction to TensorFlow for . . . - link
Introduction to game development link
Deep Learning Specialization - link

Principles of game design -link
Html, CSS and Javascript - link
R programming - link
Linux Fundamentals - link
Machine Learning - link
Gamification - link

PUBLICATION

An Amharic News Text Classification Dataset   2021
Israel Abebe Azime, Nebil Mohammed - arXiv:2103.05639   *AfricaNLP, EACL*

MasakhaneNER: Named Entity Recognition for African Languages   2021
Masakhane collaboration paper arxiv.org/abs/2103.11811 Huggingface model   *AfricaNLP, EACL*

Quality at a Glance:An Audit of Web-Crawled Multilingual Datasets   2021
Masakhane collaboration paper *arxiv.org/abs/2103.12028*   *AfricaNLP, EACL*

PROJECTS AND ACTIVITIES

Mentor
- SSA Google Developers Machine Learning Bootcamp - Gebeya 2022
- Amharic-NLP, Telegram Bot, Games in Unity 3D, Zindi Data science Competitions,

Personal Projects

- Disaster prediction, DNA sequence Classification
- NLP projects with Masakhane and EthioNLP

Extra-Activities

- Solve-IT Instructor in nationwide innovation competition (2019).
- NASA Space Apps Challenge (Addis Ababa Participant 2018)
- PyTorch Facebook Scholarship Recipient- Udacity(2018)
- Nokia and BIT Scholarship Challenge Recipient - Udacity(2021)

REFERENCES

Marcus Rohrbach   MSc Supervisor
research scientistat Facebook AI Research.
mrf@fb.com

Jaehoon Jeong   Project Manager in Iquartic (past)
Senior Data Scientist at Lucid Motors.
string.jeong@gmail.com

Viktoras Kabir Veitas   Nunet CEO
Inter disciplinary PhD researcher at Center Leo Apostel, Vrije Univer- siteit Brussel
AI researcher software project manager,co-founder, NuNet.io.
kabir@singularitynet.io or viktoras.veitas@vub.be