

Curriculum vitae

Yobsan Bayisa Leta · PhD Student & MSCA Doctoral Researcher

KIOS Research and Innovation Center of Excellence · University of Cyprus
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Research interests

Robust Edge AI, Computer Vision, Neural Architecture Search

Education

2025 – present

PhD studies · Electrical & Computer Engineering

University of Cyprus · KIOS Research and Innovation Center of Excellence
TIRAMISU MSCA Doctoral Network. Robustification of dynamic neural networks through contextual awareness and attention for edge AI. Supervisors: Prof. Maria K. Michael, Prof. Theocharis Theocharides, and Dr. Christos Kyrkou. Cross-sectoral co-supervisor: Dr. Felipe Augusto da Silva, Cadence Design Systems.

2023 – 2025

Research · Neural Architecture Search

Southern University of Science and Technology (SUSTech), Shenzhen
Hardware-aware evolutionary multiobjective neural architecture search for image segmentation, factory automation, and autonomous driving.

2021 – 2023

MSc · Software Engineering

University of Electronic Science and Technology of China (UESTC)
GPA: 3.99 / 4.00 · Thesis: Multitask Visio-linguistic Representation Learning.

2017 – 2021

BSc · Software Engineering

University of Electronic Science and Technology of China (UESTC)
GPA: 3.70 / 4.00 · Thesis: Inference and Prediction in Big Data Using Sparse Gaussian Process Method.

Publications

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1. Christos Kyrkou, Maria K. Michael, Theocharis Theocharides. **LiDSeg: Linear DehazeFormer Guidance for Efficient Semantic Segmentation in Adverse Weather Conditions**. British Machine Vision Conference (BMVC) · In press, 2026. Publication record

2. Surafel Kifetew Woldeyes, Yongmin Zhang, Wei Wang, Leta Yobsan Bayisa. **HAC-LSTM: Mobility-Aware Joint Service Placement and Task Offloading Scheme in MEC**. ICC 2025 – IEEE International Conference on Communications, 2025. Publication record
3. Weidong Wang, Mian Muhammad Yasir Khalil, Leta Yobsan Bayisa. **Online variational Gaussian process for time series data**. Journal of Big Data, 2024. Publication record
4. Leta Yobsan Bayisa, Weidong Wang, Qingxian Wang, Chiagoziem C. Ukwuoma, Hirpesa Kebede Gutema, Ahmed Endris, Turi Abu. **Unified deep learning model for multitask representation and transfer learning: image classification, object detection, and image captioning**. International Journal of Machine Learning and Cybernetics, 2024. Publication record
5. Chiagoziem C. Ukwuoma, D. Cai, E. S. Gati, V. K. Agbesi, G. Deribachew, Leta Yobsan Bayisa, Turi Abu. **Attention-Based End-to-End Hybrid Ensemble Model for Breast Cancer Multi-Classification**. Direct Research Journal of Public Health and Environmental Technology, 8, 22–39, 2023. Publication record
6. Ahmed Endris, Shangming Yang, Yutra Abel Zenebe, Biniyam Gashaw, Juhan Mohammed, Leta Yobsan Bayisa, Ali Ebrahim Abera. **Efficient Face Mask Detection Method Using YOLOX: An Approach to Reduce Coronavirus Spread**. 2022 5th International Conference on Pattern Recognition and Artificial Intelligence (PRAI), 2022. Publication record
7. Leta Yobsan Bayisa, Weidong Wang, Qing-xian Wang, Gurmu Meseret Debele, Lamessa Bona Debela. **Inference and Prediction in Big Data Using Sparse Gaussian Process Method**. Proceedings of the 6th International Conference on Digital Signal Processing, 2022. Publication record
8. Happy Nkanta Monday, Jian Ping Li, Grace Ugochi Nneji, Edidiong Christopher James, Yobsan Bayisa Leta, Saifun Nahar, Amin Ul Haq. **Shared Weighted Continuous Wavelet Capsule Network for Electrocardiogram Biometric Identification**. 2021 18th International Computer Conference on Wavelet Active Media Technology and Information Processing (ICCWAMTIP), 2021. Publication record
9. Grace U. Nneji, Jingye Cai, Jianhua Deng, Happy N. Monday, Edidiong C. James, Bona D. Lemessa, Abel Z. Yutra, Yobsan B. Leta, Saifun Nahar. **COVID-19 Identification Using Deep Capsule Network: A Perspective of Super-Resolution CNN on Low-Quality CXR Images**. 2021 the 7th International Conference on Communication and Information Processing (ICCIP), 2021. Publication record

Projects

Evolutionary multiobjective neural architecture search

A curated research collection covering evolutionary methods for discovering neural architectures that balance predictive performance with latency, energy, memory, and model complexity. It connects research papers with code, benchmarks, and deployment considerations.

Telecom bandwidth forecasting and anomaly detection

Time-series models for forecasting data-centre traffic and identifying unusual bandwidth patterns. LSTM forecasters use recent traffic history to predict future samples, while an LSTM autoencoder flags windows with unusually high reconstruction error.

Telecom alarm classification

A language-model pipeline for organizing short Chinese telecom alarm reports into meaningful categories. It first discovers groups through sentence embeddings and clustering, then trains a BERT classifier to assign new alarms to those groups.

5G-V2X roadside perception system

A roadside perception pipeline that detects and tracks road users, maps detections into road coordinates, estimates collision risk, and shares scene information with nearby vehicles. It brings vision, tracking, and communication together in an edge system.

Visualizing Gaussian process regression

A notebook exploration of how covariance kernels shape Gaussian process predictions on weather observations. Visualizations compare predicted temperatures with measurements and show the uncertainty associated with each prediction.

Activities

1 October 2026
— present

CURRENT Secondment · Turin, Italy

Research secondment at Dumarey Softronix

Working on in-cabin monitoring during my TIRAMISU doctoral secondment.

TIRAMISU partner ↗

14–18
September
2026

School & workshop · Munich, Germany

2nd TIRAMISU Summer School

Participated in the industry-hosted summer school with Infineon Technologies, Cadence Design Systems, and KPMG. The programme covered reliable edge AI, automotive computing, verification, and innovation, alongside practical sessions and laboratory visits.

Event programme ↗

19–23 January
2026

School & workshop · Turin, Italy

1st TIRAMISU Winter Workshop

Participated in the winter workshop organised by Politecnico di Torino and Dumarey Softronix. The programme combined edge-AI reliability and automotive safety with research communication and innovation training, a Dumarey laboratory visit, and the network’s mid-term review.

Event programme ↗

Through 2025

Service & community

IEEE Graduate Student Membership

Graduate student membership in the Institute of Electrical and Electronics Engineers.

24 July 2024

Service & community

Peer reviewer · IJEECS

Peer-review contribution to the Indonesian Journal of Electrical Engineering and Computer Science.

2019 — 2020

Service & community · Chengdu, China

Teaching Assistant

Supported lectures, student learning, and grading at the University of Electronic Science and Technology of China (UESTC).

During UESTC

Service & community

Student community support

Dormitory assistance and safety organization for international students.

University sports

Participation in UESTC International Cup tournaments.

Scholarships & research funding

2025 — present

Marie Skłodowska-Curie Doctoral Network · TIRAMISU

Doctoral research funding through the European Horizon MSCA TIRAMISU network at the University of Cyprus and KIOS Research and Innovation Center of Excellence.

2024

Monash Graduate Scholarship (MGS)

Awarded by Monash University in October 2024 for doctoral study in Electrical and Computer Systems Engineering. The scholarship provides a living stipend.

2024

Monash International Tuition Scholarship (MITS)

Awarded alongside the Monash Graduate Scholarship in October 2024, covering international course fees and single-cover Overseas Student Health Cover.

2023

Chinese Government Scholarship · UESTC Doctoral Offer

China Scholarship Council full scholarship offered with doctoral admission in Software Engineering at UESTC in July 2023, covering tuition, lodging, medical insurance, and a living allowance.

2023

SUSTech Scholarship · Stipend & Tuition Waiver

Awarded by Southern University of Science and Technology in June 2023 for doctoral study in Intelligent Manufacturing and Robotics, with a stipend and full tuition waiver.

2021

UESTC Full University Scholarship

Full scholarship for master's study in Software Engineering at the University of Electronic Science and Technology of China, covering tuition, on-campus accommodation, medical insurance, and a living allowance.

2021

Hohai University Second Class Scholarship

Scholarship offered with master's admission in Computer Science and Technology in June 2021, covering tuition and on-campus accommodation, subject to annual review.

2017

Ethiopian Betre-Science Scholarship

Selected under the Ethiopian Ministry of Science and Technology's Betre-Science programme and awarded an Ethiopian government scholarship for undergraduate study in Software Engineering at UESTC, China.

Master's offer

Zhejiang Sci-Tech University President Scholarship

Conditional scholarship offer accompanying pre-admission for master's study, covering registration, tuition, accommodation, a living allowance, and comprehensive medical insurance.

Awards

July 2023

Chengdu International Sister Cities Alliance · Second Prize

Second Prize for “Our Taiji Journey” in the “Youth Welcome The FISU Games” themed short-video competition of the Chengdu International Sister Cities Higher Education Institution Alliance.

2021 – 2022

Academic Achievement · Second Prize

University of Electronic Science and Technology of China.

2019 – 2020

Academic Achievement · Third Prize

University of Electronic Science and Technology of China.

2018 – 2019

Academic Achievement · Second Prize

University of Electronic Science and Technology of China.

2017 – 2018

Academic Achievement · Third Prize

University of Electronic Science and Technology of China.

Recognition

Excellent Ethiopian High School Graduate

Recognition for academic achievement before my undergraduate studies.

Technical skills

PyTorch · TensorFlow · JAX · Python · MATLAB · LaTeX. Deep learning, image analysis, transformer models, time-series prediction, and Gaussian processes.