Keneni Tesema

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EDUCATION

Swansea University

Ph.D., Computer Science   Swansea, Wales, UK

Computer Vision, Machine Learning, Point Cloud Completion   Nov 2022-Present

Honors and Awards:

- UKRI International Bursary
- EPSRC CDT Award 2019/20 - Ep/S021892/1

MSc, Computer Science   Swansea, Wales, UK

MSc in Enhancing Human Collaborations and Interactions with Data and   Sept 2021-Oct 2022
Intelligence-Driven Systems (CDT), Distinction

Honors and Awards:

- EPSRC CDT Award 2019/20 - Ep/S021892/1

China Three Gorges University (CTGU)

Hubei, P.R. China
Sept 2017- July 2021

Bachelor of Engineering

Electrical Engineering and Automation, GPA 3.82

*Honors and Awards***:**

- Chinese Scholarship Council One Road One Belt Full Scholarship
- Most Outstanding International Student of CTGU 2020
- Outstanding Student Cultural Exchange Scholarship

Addis Ababa Science and Technology University (AASTU)

Addis Ababa, Ethiopia
Sept 2015- July 2017

Certificate in Electromechanical Engineering, GPA: 3.72/4.00

RESEARCH AND PUBLICATIONS

Swansea University

- **Human-centered Point Cloud completion for subsea survey:** a PhD research program on point cloud completion in collaboration with the marine survey company: Beam**.**
- **Publications:**
  - K. W. Tesema, L. Hill, M. W. Jones, M. I. Ahmad and G. K. L. Tam, "Point Cloud Completion: A Survey," in IEEE Transactions on Visualization and Computer Graphics, doi: 10.1109/TVCG.2023.3344935.
  - Tesema, K. W., Hill, L., Jones, M. W., and Tam, G. K. L., "Denoising-While-Completing Network (DWCNet): Robust Point Cloud Completion Under Corruption", <i>arXiv e-prints</i>, Art. no. arXiv:2507.16743, 2025.

CTGU, College of Electrical Engineering and New Energy(EENE)

- **Dissertation (Thesis) project:** Designed a high voltage DC Power Supply based on aseries-resonant constant-current charging capacitor, Investigated the Thevenin model of Distributiongenerators and the effect of their integration in to grid on system voltage, designed a functional Signal Generator

- **Siemens Cup China, 2019- manufacturing competition:** (Hubei province-level) motion control competition runner up, simulated an S-400, S-1200, and S-300 PLC based machines by using an integrated TIA-PORTAL and STEP-7 software, **and** designed a line following, obstacle avoiding robot by using an 8051 microprocessor and Arduino board

WORK EXPERIENCE

Swansea University   Swansea, Wales, UK
Teaching Assistant   Jan 2021-Present
- Big Data and Machine Learning, Human-Computer Interaction (HCI),
Visual Analytics, Data Visualization

NHK-World   Remote, UK
- TV Program Monitor   Oct 2023-Present

Almaz Mamo Kiosk
- Salesperson/Marketing (part-time)   Addis Ababa, Ethiopia
                                                                                               June 2013- Sep 2021

LEADERSHIP/ TEAMWORK EXPERIENCE

CTGU EENE International Students' Community
Vice President   Hubei, P.R. China
- Recruited the establishing members of the International Students' Community   Mar 2019 – July 2021
- Hosted the Closing ceremony of the 4th International Conference on
  Intelligent Green Building and Smart Grid (IGBSCG 2018)

CTGU International Students Association (ISA)
Vice President   Hubei, P.R. China
- Recruited new members, Supervised and Delegated Sports, and Academic   Dec 2018- Dec 201
  Departments
- Organized the 8th annual Peach Blossom festival with the help of the Chinese
  Students Association
- Organized the winter sports competition, Science-fest, and Debate
  competition for international students in CTGU in 2018 and 2019

SKILLS

Research skills: Implementing state-of-the-art Point Cloud Completion, Segmentation, Detection and Point cloud Denoising models, Visual SLAM, Generative AI with Diffusion Models, Data Parallelism, Rapid Application with Large Language Models (LLMs).

Technical skills: PyTorch, CUDA, Docker, Unreal Engine (CARLA), Singularity/Apptainer, SLURM, R, SQL, C, C++, Java, Matlab, Multisim, Proteus, SIMATIC-Step 7, Simulink software

Language skills: English (*Full professional fluency)*, Amharic (*Native fluency*), Chinese (*working fluency*)
Interests/hobbies: Creative Writing , Reading, Sports (volleyball, running)