Keneni Worku Tesema

Swansea University• Fabian Way, Crymlyn Burrows, Skewen, Swansea• SA1 8EN • Wales, United Kingdom (UK) • +44-07519722658 • k.w.tesema@swansea.ac.uk / keneni worku@yahoo.com•Keneni Worku Tesema•

EDUCATION

Swansea University

Ph.D., Computer Science

Computer Vision, Machine Learning, Point Cloud Completion

Honors and Awards:

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

MSc, Computer Science

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

Honors and Awards:

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

China Three Gorges University (CTGU)

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)

Certificate in Electromechanical Engineering, GPA: 3.72/4.00

Addis Ababa, Ethiopia Sept 2015- July 2017

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:
 - Keneni W. Tesema, Lyndon Hill, Mark W. Jones, Muneeb I. Ahmad and Gary K.L. Tam, Point Cloud Completion: A Survey, in IEEE Transactions on Visualization and Computer Graphics, vol. 30, no. 10, pp. 6880-6899, Oct. 2024. https://dx.doi.org/10.1109/TVCG.2023.3344935
 - Keneni Worku Tesema, Lyndon Hill, Mark W. Jones and Gary K.L. Tam, Denoising-While-Completing Network (DWCNet): Robust Point Cloud Completion under Corruption, accepted for Computers and Graphics, Sep. 2025. https://dx.doi.org/10.48550/arXiv.2507.16743

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 Distribution generators and

Swansea, Wales, UK

Nov 2022-Present

Swansea, Wales, UK Sept 2021-Oct 2022

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

Remote, UK NHK-World Oct 2023-Present

• TV Program Monitor

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

LEADERSHIP/ TEAMWORK EXPERIENCE

CTGU EENE International Students' Community

Vice President

Hubei, P.R. China • Recruited the established 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 2019 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)

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