Europass
Curriculum Vitae

Personal information

First name(s) / Surname(s)	HADUSH HAILU, GEBRERUFAEL
Address(es)	JAPAN , TOKYO , OTAKU CHIDORI 2-25-8, HAITSUMATSUZAKI 202
Telephone(s)	- Mobile: +818095459391
E-mail	hadush.hailu@mu.edu.et
GitHub	https://github.com/hadhailu
LinkedIn	https://www.linkedin.com/in/hadush-hailu/
Nationality	Ethiopian
Date of birth	12/09/1993

EDUCATION AND TRAINING

Dates (from – to)	2019/3 ~ 2021/3
Name and type of organisation providing education and training	University of Tsukuba - Japan
Principal subjects/occupational skills covered	Numerical Simulation, Computational Biology, Programming environment, Intelligent Sensory Information Processing, Adaptive media Processing, Experimental Design in Computer Science
Research subject	Experimental Investigation of Mutual Avoidance Behavior for Multiple Autonomous Robots
Keywords	K-means Custering, Unsupervised learning classier, Kalman Filtering, State Estimation, Control and Optimization, Data fusion
Title of qualification awarded	Master of Engineering in Computer Science
Grade	3.68/4
Level in national classification (if appropriate)	11th https://cwur.org/2021-22/University-of-Tsukuba.php

Dates (from – to)	2018/3 ~ 2019/3
Name and type of organisation providing education and training	University of Tsukuba - Japan
Principal subjects/occupational skills covered	Computer Vision, Lidar sensor, Robot Operating System(ROS), YP-SPUR robot control platform, Intensive Japanese Language courses
Title of qualification awarded	Research Student

Dates (from – to)	2011/9 ~ 2016/7
Name and type of organisation providing education and training	Mekelle University – Ethiopia
Principal subjects/occupational skills covered	Artificial intelligence and Expert systems, Digital signal Processing, Simulation and modelling, System analysis and Design, Engineering Mathematics(I, II, III), Computational Methods, Design and Analysis of Algorithms, Analog electronics, Digital electronics, Signals and systems, Data structure, Operating Systems, Compiler Design,Advance Microprocessor, Cryptography and Network security, Modern Physics
Research subject	Using Machine Learning to Detect Botnet Traffic in Local Area Network (LAN)
Title of qualification awarded	Bachelor of Science Degree in Computer Science and Engineering

Grade	3.94/4
Level in national classification (if appropriate)	2nd

WORK EXPERIENCE

Dates (from – to)	2021/03 ~
Name and address of employer	[Qibitech Inc](#) Tokyo, Shinagawa City, Kitashinagawa, 5 Chome−7−14
Type of business or sector	***Robotics and AI company***
Occupation or position held	R&D Engineer
Main activities and responsibilities	• Develop computer vision algorithms for robot perception and navigation from camera and LIDAR data • Develop control algorithms for robot navigation: path planning and avoidance • Develop estimation techniques using (low-pass filter or kalman filter) for robot state estimation problems.
Frameworks and Technologies	PyTorch, YOLO, Docker, Git, OpenCV, ROS, GAZEBO, Python and C++

Dates (from – to)	2016/8 ~ 2018/3
Name and address of employer	[Mekelle University – Mekelle Institute of Technology](#) Mekelle, Tigray, Ethiopia
Type of business or sector	***Public University***
Occupation or position held	Lecturer
Main activities and responsibilities	• Delivering lectures on Artificial Neural Network and Expert systems, C++, Complexity Theory, Simulation and modeling and Advanced Microprocessor. • Designing and preparing course lectures, teaching and test materials and modules

Dates (from – to)	2017/9 ~ 2018/3
Name and address of employer	[Mekelle University – Mekelle Institute of Technology](#) Mekelle, Tigray, Ethiopia
Type of business or sector	***Public University***
Occupation or position held	Researcher and Project Investigator
Main activities and responsibilities	• Conducted research in <u>Breast Cancer Diagnosis using Artificial Neural Network</u> and <u>Optical character recognition of Geez documents using Multi-layer Neural network and Deep Learning</u> • Identified sources of funding, prepared research proposals and submitted funding applications to University

Dates (from – to)	2015/1 ~ 2016/7
Name and address of employer	Tigray Development Association Mekelle, Tigray, Ethiopia
Type of business or sector	***Non-profit organization***
Occupation or position held	Software Developer
Main activities and responsibilities	• Developed human resource management system(HRMS) for Tigray development association using Java and MySQL ([certificate](#))

COMPETITIONS AND CHALLENGES

Dates (from – to)	2019 – 2020
CHALLENGE DESCRIPTION	Tsukuba Challenge – Open area mobile robot navigation challenge Tsukuba, Japan
Main activities and responsibilities	• Develop object detection using OpenCV • Handled fusing of GPS, IMU and Odometry using EKL Localization • Supported Robot frame design

Dates (from – to)	2015 - 2018
CHALLENGE DESCRIPTION	RoboSoccer Competition Mekelle University | Mekelle, Ethiopia
Main activities and responsibilities	• Hacked three Biomorphic RoboSapien toys to make them controllable using Raspberry PI and installed Camera on its head for Goal and Ball detection • Developed Robot motion planning and computer vision/Image processing (ball, robot and goal detection) part using Python and OpenCV • Certificate 1, Certificate 2, Certificate 3

PUBLICATIONS

PUBLICATIONS DESCRIPTION	1. Hadush Hailu, Ayanori Yorozu and Akihisa Ohya, "Experimental Investigation of Mutual Avoidance Behavior for Multiple Autonomous Robots", Annual Conference of the Robotics Society of Japan, vol. 38, 2020 2. A. Yorozu, H. Hailu and A. Ohya, "Experimental Investigation of Mutual Collision Avoidance Behavior for Multiple Mobile Robots," 2021 IEEE/ASME International Conference on Advanced Intelligent Mechatronics (AIM), 2021, pp. 1164-1169, doi: 10.1109/AIM46487.2021.9517418.

PERSONAL SKILLS AND COMPETENCES

MOTHER TONGUE TIGRIGNA / ትግርኛ

Other language(s)

Specify language and evidence of skill level (language certificate)

Self-assessment	Understanding		Speaking		Writing
European level	Listening	Reading	Spoken interaction	Spoken production	
English	Excellent	Excellent	Excellent	Excellent	Excellent
Amharic/አማርኛ	Excellent	Excellent	Excellent	Excellent	Excellent
JAPANESE /日本語	Excellent	Good	Excellent	Good	Good

SOCIAL SKILLS AND COMPETENCES
SUMMER TUTOR

TECHNICAL SKILLS AND COMPETENCES
Linux Router and Community Network
PC Maintenance and troubleshooting

ARTISTIC SKILLS AND COMPETENCES
Music, writing, design, etc
PRACTICING GUITAR
YouTube Channel
RUNNING MARATHON

Driving licence
MT Driver's License