

TOLERA GIRMA DEGEFA

Model-Based Design Engineer

+48-502-099-624

@ tolegirma@gmail.com

Gliwice, Poland

SUMMARY

I want to establish a career in a competitive knowledge-based target-driven environment that encourages innovation, industriousness and facilitates resources that enable optimal leverage of potential and skills for the mutual advancement of industry and society. Customized to help with laboratory, fieldwork and to conduct delegated activities with productivity and precision. Significant interpersonal relationships and leadership skills.

EDUCATION

Bachelor of Science (BSc): Mechanical Engineering

Jimma Institute of University

01/2015 - 01/2019 Jimma, Ethiopia

- Dynamic System Modelling
- MATLAB/SIMULINK
- Control Theory, PID
- Project: Modeling and Controlling a 6-DoF Robotic Arm

Master of Science (MSc): Automatic control and Robotics

Silesian University of technology

01/2019 - 01/2021 Gliwice, Poland

- PID, MPC(Model predictive Control), and Adaptive Control
- MATLAB/SIMULINK
- C++, Python
- Project: Active Noise Cancellation (MFC Piezoelectric transducer)
- Inverted Pendulum Controlling

ERASMUS Student Mobility

Silesian University of Technology

01/2020 - 01/2021 Gliwice, Poland

EXPERIENCE

Control System Modelling and Simulation Engineer (CAE)

ZF

01/2022 - Present Poland, Bielsko-biala

- Mathematical modelling and Simulation of steering system.
- Model characterization.
- SBW (Steer by wire) Modelling and simulation.
- Model Validation at system and component level
- Control theory
- MATLAB/SIMULINK

SKILLS

MATLAB/SIMULINK

Python

C++

System Modelling and Control

PLC Programming

Robotics

ACHIEVEMENTS



Gold Medalist of 2019

Gold Medalist of 2019 - by my outstanding hard work I become a gold medalist of the faculty, obtaining the highest grade.



Publications

1. Mathematical modeling of piezoelectric actuator damper in the active vibration control.

DOI: [10.3390/app122312135](https://doi.org/10.3390/app122312135)

2. The study of the Influence of temperature and low frequency on the performance of the laminated MFC piezoelectric energy harvester.

DOI: [10.3390/app122312135](https://doi.org/10.3390/app122312135)



Certificate of merit for the final year project

Modelling, control, and prototyping Of Articulated Robotic Arm in CIM environment.



Training certificate from EMT systems

Training certificate from the well-known training center known as EMT systems for programming SIEMENS SIMATIC S7-1500 PLCs. Throughout the training, I was able to grasp the fundamentals to the advanced level of PLC programming.