

Getachew Ambaye

Contact



+1(316) 2262434



geheadmassie@gmail.com



getachew-ambaye



https://geheadmassie.github.io

Address: Wichita, Kansas, USA

Soft Skills

3D Experience - **SIMULIA**

GD&T

ABAQUS, FE-Safe

CAD, CATIAv5, SOLID-WORKS

MSC ADAMS,

SIEMENS PLC,(TIA)

PYTHON, MATLAB

ABB Robot, UR Robot

ABB Robot Studio, RoboDK

FluidSIM, Micro-controller, AI

Hardware Skills

Arc welding

Machining (Lathe)

Grinding, drilling, boring

Micro-controller and sensors integration

3D-printing

Casting for soft-robots

Woodwork

Maintenance of cars and home appliances

COE Participation

- COExperience 2024 Dallas, TX.

Teaching Experience at WSU

Engineering Graphics:

- IME 222
- IME 222L (CATIAV5 & 3DX)

Courses Completed at WSU

- Robotics and Control
- Computer Integrated Manufacturing
- Applied Quantum Computation
- Robot Programming & Applications
- Machine Learning Essentials & applications
- Statistical Methods for Engineers

Membership: EAI, IAENG

Personal Qualifications

- Highly Adaptable
- Quick Learner

Google Scholar Address:
Publications



Education and Training

2022-Present	PhD. Industrial & System Manufacturing Eng. (Ready)	WSU, USA
2017-2020	MSc. Mechanical System Design Eng.	JiT, Ethiopia
2012-2016	BSc. Mechanical Engineering	JiT, Ethiopia

Work Experience

Company Projects Works

- Design and development of a small CAM analyzer including the programming
- Natural and Forced Frequency Analysis for 3-Axis Milling Machine to Improve Stiffness, presented at Advanced Manufacturing Processes in WSU, 2023.
- Potato Processing Plant Facility Planning and Design for BiT, 2022
- Product design and Stress analysis using ANSYS for Ethio-Engineering Group, 2021.
- Micro-dairy equipment Design for the Amhara Dairy Platform, 2021
- Design of HDPE & PVC pipe puller machine for Amhara Pipe Factory, 2020 Degradation on Energy Conversion, 2020

Academic Teaching Experiences

2022-Present	GTA and GRA	Wichita State University (WSU), KS, USA
2024-Present	Engineering Professor	Hesston College, KS, USA
2021	Gust Lecturer (Trainer)	Ethio-Engineering Group (EEG), Ethiopia
2020-2022	Lecturer	BiT, Ethiopia
2017-2020	Lecturer	JiT, Ethiopia

Organisational/managerial skills

- Executive secretary for Mechanical Design Chair Council, Faculty of Mechanical and Industrial Engineering, Bahir Dar Institute of Technology (BiT) (2021- 2022).
- Coordinator of Mechanical Design Chair for ABET Accreditation (BiT (2021-2022)
- Executive secretary to developed Strategic Plan for Faculty of Mechanical and Industrial Engineering, Bahir Dar Institute of Technology (2021-2022)
- Industry (Amhara Pipe Factory)-linkage community service coordinator (2020)
- Preparing Teaching Technical Drawing module for Grade 11 & 12 teachers (2020).
- Coordinating and working as a primary investigator on different projects.

Publications

On process

- [Challenges and Advancements in Enhancing Performance of Soft Robots \(Ready\)](#)
- [Detecting Misalignments of Drilled Holes using Machine Vision, \(ICAST 2023\)](#)

Published

- Soft Robot Design, Manufacturing, and Operation Challenges: A Review, 2024
- Robot arm damage detection using vibration data and deep learning, 2023
- Detection of small screws using machine learning, 2023
- Numerical stress analysis and fatigue life prediction of the classical external geneva mechanism, 2022
- Contact temperature analysis of the classical Geneva mechanism through numerical methods, 2022
- Numerical comparative modal analysis of connecting rod between fixed crankpin and fixed piston pin, 2021
- Determination of important contact parameters for spur gear design, 2021
- Effect of backlash on transmission error and time-varying mesh stiffness, 2020
- Numerical study of the effect of backlash on flash temperature of spur gear, 2020
- Dynamic analysis of spur gear with backlash using ADAMS, 2020
- The performance of gear with backlash: A Review, 2020
- Short Descriptions of Measurements and Instrumentation, 2020
- Time and frequency domain analysis of signals: a review, 2020

Peer Review Activities

- Neural computing & applications
- Australian Journal of Mechanical Engineering