

Biniyam Lombe

Personal Statement Driven and open-minded Electrical and Electronic Engineer, First-Class Honours graduate from the University of Bristol. Proficient in circuit analysis, electronics, design, and prototyping with strong simulation tool expertise. Seeking industry experience to transition from academia, eager to enhance transferable skills in an international setting.

Highlights	<ul style="list-style-type: none"> ▪ Simulation & Design ▪ FE Analysis ▪ Project Management ▪ Research ▪ Programming ▪ Technical Report ▪ Latex ▪ Prototype & Build 	
Education	<p>University of Bristol Electrical & Electronic Engineering Expected Grade – 1st Class 2019-2022</p> <p>Modules: Linear Circuits, Electronics, Communications, C for Embedded Systems, Digital Systems, Signals and Systems, Optoelectronic Devices and Systems, Digital Filters and Spectral Analysis, and Antennas.</p>	
Work Experience	<p>University of The West of England's International College Kaplan International Pathways Tutor, Bristol, UK Jan-present</p> <ul style="list-style-type: none"> - Taught Electrical and Electronic Engineering Principles 1, Fluid Mechanics to first-year students, and Introduction to Computer Programming, Intermediate Mathematics, and Physics to pre-university foundation year students. - Contributed to curriculum development, exam preparation, and module marking. - Served as a learning advisor, providing comprehensive assistance to 16 students. <p>AddisCoder Introduction to Programming and Algorithms, Addis Ababa Jul - Aug. 2023</p> <p>Volunteer Teaching Assistant at AddisCoder, selected from 219 applicants to support 100 students. Invested annual and unpaid leave to contribute to Professor Jelani Nelson's project in Ethiopia. Facilitated student progress, designed problem sets, and delivered simplified programming mini lectures to enhance learning experience.</p> <p>Fosera Electronics Design Engineer Intern - Bahir Dar, Ethiopia Sep-Oct. 2022</p> <ul style="list-style-type: none"> - Conducted impactful research to optimize testing strategies for Fosera Manufacturing PLC solar home systems. - Proficiently trained electronics technicians in utilizing PCB design and simulation tools (KiCad, Altium Designer). - Spearheaded collaboration across departments, resulting in the development of a comprehensive Waste Management Guide. - Demonstrated expertise by leading a 7-port USB-Hub PCB design project using Altium Designer software. <p>Bristol City Council Energy Service Intern – Bristol, United Kingdom Sep-Oct. 2021</p> <ul style="list-style-type: none"> - Contributed to Bristol City's decarbonization and Electric Vehicle Charge Point initiatives, specializing in EV infrastructure signal testing. - Collaborated with cross-industry engineers and city council GIS experts to strategically select EV charge station locations citywide. - Acquired and sharpened technical proficiencies, including ArcGIS maps utilization, and developed essential soft skills encompassing effective communication, time-management, and leadership. <p>Addis Ababa University Electrical & Computer Engineering Intern TA – Addis Ababa Jun-Aug. 2021</p> <p>Planned & delivered Circuit Theory & Electronics tutorial sessions for Biomedical Engineering students. Also, worked as a laboratory assistance, organised office hours & 1-to-1 consultation schedule for students with special needs.</p>	

Extra-curricular Activities

Albert Tutorial and Volunteer Centre: Founder and Executive Director

2012-present

- The organisation offers free teaching services to disadvantaged students & has impacted over 250 students per year since 2012 using a network of more than 55 volunteer teachers.
- Fundraised & donated school materials each year for more than 40 students from low-income families since 2015.

Burst Radio: Bristol University Student Radio Station

2019-2020

- Host of a radio show which promotes the cultural heritages of African countries through music & inviting various experts from different fields to the show.

Awards & Achievements

University of Bristol

FACE Pius Adesanmi Memorial Student Award for Outstanding Pan-Africanism

Jun. 2020

The award recognises students who have made a positive contribution in supporting the African community. Awarded a 2nd Prize for the positive contribution I made in Ethiopia, Uganda, and the UK through assisting students, community engagement work and promoting African Countries culture.

Bristol PLUS Award

2019-2020

It is given to students which demonstrates evidence of significant professional skills developed through work experience and various extracurricular activities.

Ashinaga Foundation

Ashinaga Africa Initiative (AAI)

2017-2018

Awarded a fully funded scholarship for my undergraduate studies, selected among 200 applicants in Ethiopia.

Projects

Year 1

2019/20

- Ultrasonic Transducer design.
- Developed a computer game using Pygame and Bus simulation system using different Python packages such NumPy, Matplotlib.

Year 2

2020/21

- Simulated, designed, and assembled a highly efficient & well-regulated DC power supply by using a high voltage AC source.
- Developed a peak detector that communicates with a data source which provides bytes upon request, and that identifies & stores bytes with highest value and its adjacent bytes in the sequence of the retrieved data.

Year 3

2021/22

- Designed windmill speed controller using MATLAB Simulink within 24-48 hours timeline. The speed controller design was used in a high-speed & high precision motor application by using a P+I controller.
- Programmed a self-driving robot by using a C language in a group of two people.
- Designed a satellite antenna & gained an ability to effectively select Low Noise Amplifiers (LNA) by using specifications provided to meet the requirements. Also, performed complex mathematical calculations to determine the size of the satellite antenna.
- Design and Investigation of a DC-DC Boost Converter for a Solar Photovoltaic Application. Developed project management, research, design, prototyping, investigation, and reporting skills.

IT Skills

Microsoft Office Packages

Python

MATLAB/Simulink

AWR-DE

ModelSim

Microsoft Visio

KiCad

Altium Designer

Power BI

AutoCAD

Language

Amharic: Native

English: Fluent