# PHILIMON D. AYALEW

VEGESACKER STRASSE 89, BREMEN, GERMANY

HOMEPAGE







### Education

Bremen Computer Science - BSc., Constructor University Bremen

Remote Software Engineering Program, ALX Holberton

Sep 2022- Jun 2026 Jan 2021 - Feb 2022

CU Courses: Algorithms & Data Structures | Operating Systems | Programming in C & C++ | Automata | Computer Vision..

ALX Courses: System Design & DevOps, Backend development, Infrastructure Development, Foundational Software Engineering...

## **Experience**

**Constructor University,** Bremen, Germany | Teaching Assistant for Intro to Python

Sep 2024 - Jan 2025

- Served as a Teaching Assistant for the Intro to Python course, providing one-on-one tutoring, leading weekly tutorials, and assisting students with Python programming assignments.
- Delivered personalized tutoring sessions to assist students with Python fundamentals, algorithms, and debugging.

**Everest Systems GmbH,** Remote | Software Developer, Working Student

Feb 2023 - Nov 2024

- Developed and optimized the platform's Authentication System, contributing over 50% of its functionality, enhancing security and user access by streamlining authentication.
- Restructured the platform's page rendering by integrating a presentation layer, improving data fetching and rendering efficiency by 30%, enhancing user experience.
- Collaborated with an external team to integrate a proprietary validation language to our authentication system, allowing for verbose condition enforcement. This enhancement resulted in a 25% increase in condition usage across the system.
- Boosted the authorization system's test coverage by 90%, improving system reliability and reducing manual testing efforts by 50%.

#### Google Developer Student Club, Bremen, Germany | Technical Lead

• Led student project preparation for Google Challenges, managing a team and incorporating **TDD** principles into the development of a full-stack web application, which qualified for the Hult Prize Global Semi-Finals in Tunis.

**The Room/ALX,** Remote | Software Engineering Technical Mentor

Aug 2022 - Feb 2023

- Taught and mentored over 1000+ students from across Africa in software engineering, delivering lectures, leading hands-on workshops, and providing guidance on key topics..
- Successfully certified over 250 students, increasing certification rates by 30% through personalized mentoring, rigorous assessments, and targeted feedback.
- Developed a Slack bot to streamline certification handover, perform plagiarism checks, and answer general inquiries for over 1000+ students.

## **Projects**

grubOn | 🕥

SoftRenderer | 3D rendering engine implemented in pure C | Used: C, .NET Aug 2024 - Present

- 3D renderer that supports both **Rasterization** and **Ray Tracing** rendering techniques.
- Written completely from scratch with little to no external libraries used.

A bite-sized solution to a global problem. | Used: Flutter, Firebase, Tensorflow, and Google Maps

- Grub On is your gateway to reducing food waste and fostering community connections.
- Global 100 finalist in the 2024 Google Solution Challenge.

#### Skills

**Programming Languages:** C#, C/C++, Typescript, Python, dart

FrameWork/Libraries: .NET, Flutter, Next.js, Vue.js, Robot Framework, PyTest, Selenium

**Languages:** English (C2), German(A2)

Others: Firebase, Python (TensorFlow, Keras, Pandas), PostgreSQL, Git, Nginx, TDD



Feb 2024