

Youssif Goda

(414) 406-3749 | youssifsalah050@gmail.com | [LinkedIn](#) | [Github](#) | [Portfolio Website](#)

WORK EXPERIENCE

GE HealthCare

May 2025 – Present

EEDP Software Engineering Intern

Waukesha, WI

- Built a modular Go-based API client designed for Terraform integration, featuring secure OAuth2 authentication and encrypted token caching through multiple configurable methods.
- Developed a custom Terraform provider integrating the API client to enable infrastructure-as-code provisioning of tenant organizations, supporting full CRUD operations, state management, and reusable modules.
- Collaborated in a cross-functional Agile Scrum team to gather requirements, design, and implement a solution that automated tenant onboarding, saving 4 days of manual work per new organization.

Campus Life Office ([Featured](#))

Aug 2023 – Present

Web Developer & Residential Advisor

Dickinson College, PA

- Built a web application using React, JavaScript, and CSS for Resident Advisor housing assignment saving 8+ hours of office time and resources; deployed it into AWS using Vercel.
- Led residential areas with a total of 200+ residents, fostering an inclusive and supportive community, organized and facilitated 15+ community-building events.
- Awarded the Academic Excellence Award for outstanding academic performance and rehired for 3rd year in a row.

Academic Technology Department ([Featured](#))

Sep 2024 – May 2025

AI/ML Software Engineering Intern

Dickinson College, PA

- Developed an Arabic AI chatbot on UNIX/Linux environment using Python, OpenAI API and locally hosted LLMs exposed via Llama to assist students in learning Arabic resulting in enhancing their engagement by 70%.
- Engineered system prompts to guide LLM behavior and integrated LangChain for chat memory and input validation, reducing prompt injection risk by 60% and improving contextual consistency by 50%.
- Enabled professor-driven customization of chatbot behavior via the frontend and implemented SMTP integration for students to email formatted chat transcripts.

84 Lumber ([Featured](#))

Sep 2023 – Mar 2024

Solutions Architect student researcher

Remote

- Participated in a project to modernize and document 50k+ lines of legacy CBASIC code to Python/Java by developing a NLP pipeline for automated code conversion and documentation.
- Implemented Abstract Syntax Tree (AST) using Data Structures & Algorithms (BST & DFS, BFS) and an ANTLR4 pipeline to create a CBASIC grammar definition program, maintaining the code hierarchical structure.
- Researched Hugging Face Transformers and pre-trained language models like BERT and GPT to investigate the efficiency of AI-powered code documentation and modernization.

RESEARCH PROJECT

CPU vs. GPU Comparative Research | *Python, PyTorch, nanoGPT, Weights & Biases, pynvml*

[GitHub](#)

- Designed and executed a reproducible benchmarking pipeline using Python, PyTorch, and nanoGPT to train character-level language models across five hardware platforms and three model complexities, generating a cross-hardware performance dataset.
- Instrumented custom GPU telemetry using NVIDIA's pynvml library to collect per-iteration energy consumption and token throughput metrics, enabling detailed analysis of hardware efficiency during model training.
- Analyzed the impact of model complexity and block size on training throughput and energy efficiency using Weights & Biases experiment tracking, identifying up to a 239% efficiency difference between GPU configurations.

EDUCATION

Dickinson College, Bachelor of Science in Computer Science

Carlisle, PA

Dean's List: Fall 2023–2024 Academic Year

Expected May 2026

- Relevant Coursework: Data Structures and Algorithms, Open Source Software Development, Database Systems, Artificial Intelligence, OOP in Java, Computer Networks, Analysis of Algorithms, Calculus, Discrete Mathematics

TECHNICAL SKILLS

Programming Languages: Java, Python, JavaScript, TypeScript, GoLang, R, C/C++, SQL

Frameworks & Libraries: React.js, GIT, MongoDB, Flask, jQuery, OpenAPI/Swagger, SMTP, MATLAB, PyTorch

Cloud Services: AWS, Azure, Vercel, TerraForm, CDK, Cloud Formation

languages: English & Arabic