

PRINCE LARBI AMPOFO

+971-50-147-6254 ✉ pla252@nyu.edu [linkedin.com/in/pla252](https://www.linkedin.com/in/pla252) github.com/princeampofo

Education

New York University, Abu Dhabi

Aug. 2019 – May 2023

B.S. in Computer Science, Minor in Mathematics(3.78/4.00)

Abu Dhabi, UAE

- Capstone Project - Breaking Language Barriers: Enhancing Text-to-Code Translation with Multilingual Fine-tuning

New York University, New York

Aug. 2021 – Aug 2022

Studied away at NYU CAS as a Global Studies Track Scholar(4.00/4.00)

NY, USA

Research Interests

- Natural Language Processing
- Information Retrieval
- Software Engineering
- Data Mining
- Machine Learning
- Information Visualization

Academic Experience

Center for Interacting Urban Networks

May 2023 – Present

Research Assistant

NYU Abu Dhabi, UAE

- Collaborating with a team of researchers to design, build, and deploy a set of visualization tools to enhance urban data analytics
- Harnessing the potential of open data by developing **CityGraph**, a framework which uses a knowledge graph to consolidate data, enabling knowledge discovery
- Developing question-answering systems using **LLM**'s and **RAG** models to dynamically retrieve and analyze information from both tabular data and text documents.

Center for Interacting Urban Networks

Mar. 2022 – May 2023

Undergraduate Research Assistant

NYU Abu Dhabi, UAE

- Developed a comprehensive data repository to support community-wide sustainability initiatives at the NYU Abu Dhabi campus
- Employed knowledge in **React** and **Material UI** to design and implement a user-friendly front-end interface for the data repository
- Utilized **React Google Charts** to create clear and easy-to-understand visualizations of the data, revealing insights and trends over the years

Academic Resource Center

Aug. 2022 – May 2023

Undergraduate Teaching Assistant

NYU Abu Dhabi, UAE

- Clarified complex concepts, and assisted students with reviewing lecture materials for **Data Structures** and **Algorithms** course
- Assisted computer science undergraduate students with their lab and programming assignments during scheduled office hours
- Organized workshops, tutorials and competitions to help students learn new programming languages, technologies and also collaborate with each other

Center for Artificial Intelligence and Robotics

Aug. 2022 – May 2023

Undergraduate Research Assistant

NYU Abu Dhabi, UAE

- Utilized **Python** to web-scrape and clean code snippets from online sources to create a high quality dataset for natural language to code generation tasks
- Worked on enhancing the code generation capabilities of GPT-J, a large language model by further fine-tuning on this custom dataset
- Achieved a significant **1.24%** increase in BLEU score in terms of python code generation when GPT-J is fine-tuned on both Python and Java pairs as compared to Python pairs alone.

OpenGulf Research Group

Sept. 2020 – May 2022

Undergraduate Research Assistant

NYU Abu Dhabi, UAE

- Imaged a collection of telephone directories from United Arab Emirates specifically Abu Dhabi for text extraction and data analysis
- Utilized **Tesseract**, an optical character recognition engine to extract text from digitized telephone directories and cleaned up extracted data using **OpenRefine**
- Co-authored a research paper which got presented at European Association for Digital Humanities Conference (EADH) 2021

Industry Experience

LinkedIn Corporation

May 2022 – August 2022

Software Engineer Intern

Sunnyvale, California

- Developed an end-to-end reporting service using the **Python** framework, **Flask** to assist on-call engineers with triaging and resolving deployment issues, projected to enhance their productivity by **30%**
- Wrote well-optimized SQL queries to seamlessly capture and store data extracted from the deployment pipeline within a **MySQL** database.
- Wrote unit and integration tests using **Pytest** to test functions and API endpoints, achieving **98%** code coverage during the build process

TalentBox Information and Security Systems

June 2020 – August 2020

Full Stack Developer Intern

Accra, Ghana

- Developed a project management system using **Bootstrap**, **Node.js** and **MongoDB** to keep track of projects and also ease the process of organizing projects
- Leveraged knowledge in **Docker** to containerize the application and deploy it to an Ubuntu droplet on Digital Ocean
- Implemented CI/CD pipelines using **CircleCI** to automate building, testing, and deployment processes, significantly improving deployment frequency

Scholarships and Awards

NYU Abu Dhabi Summer Research Funding(May. 2021 - Jul. 2021)

Awarded an amount of \$2000 to work on the Abu Dhabi Calling Research Project

NYU Abu Dhabi Summer Internship Funding (Jun. 2020 - Aug. 2020)

Awarded an amount of \$2000 to pursue an internship at TalentBox

Publications

- Wrisley, David Joseph, Prince Ampofo and Muhammad Wajahat Mirza. Finding Culture in Data Preparation: Interdisciplinarity and the Phone Book. European Association of Digital Humanities 2021 Proceedings (Krasnoyarsk, Russia, 23 September 2021).

Technical Skills

Languages: Python, C++/C, Java, HTML/CSS, JavaScript, SQL

Developer Tools: VS Code, Eclipse, Git, Github

Technologies/Frameworks: React, Express.js, MongoDB, Docker, Bootstrap, Flask, Pytest ,PyTorch, AWS