Welcome to my resume!

The resume is available as .html and .pdf.

## Narrative

I am a biological scientist because I study and research on bioinformatics, genomics and computational biology. Meaning I hold a BSc in some biological science degree but also I am a programmer.

I am a programmer because I like writing code just for the sake of it.

I write code in C#, Rust, and python. I can also whip up some perl scripts whenever I'm feeling like it.

I build systems and I contribute to several open-source projects.

I love teaching! See, for example, my YouTube channel where I make programming and software development tutorials (YouTube), a series of videos about rust-analyzer (YouTube), or the article about Pratt parsers.

Oh, and I love writing:-)

## Contacts

#### Name

Faith Olusegun

#### **GitHub**

https://github.com/propenster

#### **Email**

See GitHub profile

# Core Competencies

- Building complex systems software from nothing
- Growing open source communities
- Implementing compilers, IDEs, build tools
- Rust mastery

# Education

2013-2018, Bachelor of Technology
 Federal University of Technology Akure, Nigeria
 First-class honors (4.51/5.00)

# Professional Experience

## Asset and Resource Management Holding Company

From Apr 2023

https://www.arm.com.ng

:Software Developer

• Designed and developed software applications that have driven over USD 10 million in remittances and investment portfolio. • Re-engineered a statement generation and dispatch service that saw an over 1500% performance improvement and time to completion reduced from over 5 days to generate and dispatch statements for 100,000 clients to 4 hours only. • Trained and mentored other software developers on best practices, secure coding, and API optimization techniques.

#### Sobel.io

From Jun 2023

https://www.sobel.io

:Rust Developer

I am a member of the dev team for sobel.io and a contributor to some of their open-source projects including llm-chains, llm-chains-opanai, and comparator-rs

• Participated in systems and large language models research in the Sobel-Stockholm University partnership. Our project, "Comparator," a tool for psychotherapists, was featured on Swedish Radio. • Fine-tuned the image classifier and emotion detector models of the comparator-rs project. • Contributed to the company's core open source and in-house projects built in Rust, including llm-chain, llm-chain-openai, and empatik

#### Parallex Bank Limited

Mar 2022 to Apr 2023 htttps://www.parallexbank.ng

:Software Engineer

• Designed, architected, and implemented practical financial software solutions. • Implemented the bank's core integration to switches, third-party Fintechs, Nigeria Inter-Bank Settlement Scheme (NIBSS), and the Central Bank of Nigeria (CBN). • Championed and saw to the completion of important integrations to drive the bank's digital transformation program.

## Wragby Business Solutions and Technologies

Oct 2021 to Mar 2022

https://www.wragbysolutions.com

:Senior Backend Engineering Consultant

• Designed and implemented practical software solutions. • Designed and developed product barcoding and QR coding solutions for pharmaceuticals and supermarkets, installed and trained customers on the usage of the software. • Worked with Software architects, Sys Admins, and Project Managers to develop business solutions using Microsoft technologies.

## Fidelity Bank PLC

Sep 2020 to Oct 2021 <a href="https://www.fidelitybank.ng">https://www.fidelitybank.ng</a>

:Software Developer

• Worked in an Agile team of Software Developers, Built and integrated Application Programming Interfaces (APIs) to drive banking processes using clean code architecture. • Built and deployed different API components to different Azure environments, IIS, and unit tested different components using the xUnit testing framework. • Maintained and provided technical support for applications in production, including a visitor management system serving front desk officers, an SME account opening portal serving over 1 million businesses, and Azure API Management and delegated portals supporting the bank's flagship open API product.

# Open-Source Contributions and Projects

# File Query Language (FQL)

**Overview:** FQL (File Query Language) is a simple and powerful file querying language designed to help you efficiently search and extract information from text files. Whether you need to analyze log files, parse JSON, or extract specific content from text files, FQL provides a versatile set of commands to simplify the process. **Tools:** Rust, VSCode, git. **Role:** Author and core maintainer **Link:** https://github.com/propenster/fq

#### **PipenGeneX**

**Overview:** pipengenex is a powerful framework designed for creating and executing Bioinformatic pipeline workflows. It includes a Command-Line Utility (CLI) tool for effortlessly running pipeline workflows and tasks defined through JSON workflow definitions. Some notable features of pipengenex include task parallelization and flexible workflow configuration. **Tools:** Rust, C#, VSCode, git, Perl. **Role:** Author and core maintainer **Link:** https://github.com/propenster/pipengenex

#### **ERVCaller-rs**

**Overview:** ERVCaller-rs is a rust port of the popular tool designed to accurately detect and genotype non-reference unfixed endogenous retroviruses (ERVs) and other transposable elements (TEs) in the human genome using next-generation sequencing (NGS) data. The original ERVCaller package was written in perl. **Tools:** Rust, VSCode, git, Perl. **Role:** Author and core maintainer

Link(s):

https://github.com/xunchen85/ERVcallerhttps://github.com/propenster/ERVCaller-rs

#### **BioBencher**

Overview: This is a tool that benchmarks performance and CPU footprint bioinformatics and genomic analysis tools particularly MSA, phyllo tools using our base debigenic genomic and bioinformatic analysis pipeline. Tools: C#, docker, git, debigenic, BEDTools, BLAST, Clustalw2, Phylip, HMMER, MUMER, QuEST, VELVET. Role: Author and core maintainer Link(s):

https://github.com/propenster/biobencher https://hub.docker.com/repository/docker/propenster/debigenic

## debigenic

Overview: is an open-source genomic and bioinformatics data analysis pipeline that runs on Debian Linux (Ubuntu 22.04) and contains a setup of over 50 genomic and bioinformatic exploration and analysis tools. It is reproducible, duplicatable, sharable, usable and extendable by anyone, any researcher anywhere in the world. With debigenic, you do no not need to carry an office or research computer anywhere, just find any PC or laptop that could run docker and you have a whole virtual machine (container) that has everything you need for bioinformatics at least almost every tool you might need. It is like you could carry your bioinformatics lab everywhere and in fact share you lab with anyone you want irrespective of where they are. **Tools:** docker, Role: linux bash shell, git. Author and core maintainer https://hub.docker.com/repository/docker/propenster/debigenic/general

#### Clash

**Overview:** is a simple to use, efficient, and full-featured Command Line Argument Parser library for C# .NET. You can use Clash in your CLI applications to parse CommandLine Arguments to C# objects. **Tools:** C#, Visual Studio, git **Role:** Author and Core Maintainer **Link:** https://github.com/propenster/Clash

## **SimpleHTMLParser**

**Overview:** SimpleHTMLParser is a simple to use, efficient, and full-featured HTML Document Parser for C#. You can parse an HTML document and retrieve any element(s) in it. **Tools:** C#, Visual Studio, git **Role:** Author and core maintainer **Link:** https://github.com/propenster/simplehtmlparser

#### Veal

**Overview:** I'm creating my own web development framework or microframework. It is meant to be faster, simpler and much easier to run anywhere than Microsoft's ASP.NET Core. I call it a lightweight web development framework written in 100% C#. **Tools:** C#, Visual Studio, git **Role:** Author and core maintainer **Link:** https://github.com/propenster/veal

#### Selenium-rs

**Overview:** selenium-rs is A rust client for the Selenium webdriver (WIP). **Tools:** rust, cargo, rustfmt, git, selenium web driver. **Role:** Contributor **Link:** https://github.com/saresend/selenium-rs

#### llm-chain

**Overview:** llm-chain is a powerful rust crate for building chains in large language models allowing you to summarise text and complete complex tasks. **Tools:** rust, cargo, rustfmt, git. **Role:** Contributor **Link:** https://github.com/sobelio/llm-chain

#### Faker.NET

**Overview:** I created and I am maintaining a NUGET package for .NET developers to generate dummy/fake data for collections. **Tools:** C#, Github markdown, .NET Standard, NUnit. **Role:** Author and core maintainer **Link:** https://github.com/propenster/Faker.Net

## Sluggify-rs

**Overview:** A simple slug or clean URL generator library for Rust. **Tools:** Rust, Github markdown, cargo, crates.io. **Role:** Author and core maintainer **Link:** https://github.com/propenster/sluggify-rs

## RestSharp

**Overview:** Simple REST and HTTP API Client for. NET. **Tools:** C#, Github markdown. **Role:** Contributor **Link:** https://github.com/restsharp/RestSharp

#### llcc94

Overview: Writing a compiler using Rust. Tools: rustlang, cargo, git. Role: Contributor