**Moussa Haidous**

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**EDUCATION**

**Lebanese American University** | Bachelor of Science in **Computer Science** May ‘22

* Cum. GPA: 3.98/4.0 – Distinguished List – Vice President of the CS Club

**EXPERIENCE**

**Part-time Software Engineer** Sept. ‘21 – Present

Murex – Build Systems

* + Build & deploy internal **Java** **gRPC microservices** to **aggregate data** on **production build processes**.
  + Design & enforce **quality gates** on build processes such as **build time** & **output size**.
  + Engineer an **API Gateway** using **Java Spring** to translate **RESTful** requests into **gRPC** calls.
  + Develop a custom **Java Nexus Repository Manager 3** recipe to enable **build caching** & **decrease development time**.

**Software Engineering Intern** Jun. ‘21 – Aug. ‘21

Murex – Build Systems

* + Optimized the **speed performance** of a frequently used **Python** internal tool by **15x**.
  + Built **8+** **Jenkins pipelines** to accelerate development and deployment of the tool.
  + Developed a **Flask** **RESTful service** that provides an API for the tool which facilitates its usage by Murex engineers.
  + Designed & deployed an **Angular dashboard** to display **aggregate data & indicators** generated by the tool.
  + Implemented **additional features** for the tool that **improve the quality of life** of development teams across Murex.
  + Managed the **incremental deployment** of the new tool version across the Murex production codebase.

**Assistant Deputy of the Training and Educational Development Team** Sept. ‘20 – May. ‘21

Lebanese American University - Model Arab League

* + Drafted and prepared **training material** for the 10th LAU Model Arab League.
  + Trained and mentored **30+ university students** to become Model Arab League trainers.
  + **Lead the transition** towards **online material delivery** due to the coronavirus pandemic.
  + **Researched**, **composed**, and **edited** lengthy papers on **historic**, **political**, and **economical** topics.
  + Aided students in writing **well-researched papers**, finding **credible sources** and **fact-checking** their findings.

**FEATURED PROJECTS**

**Fine |** [**Live Demo**](https://haidousm.com/fine) **-** [**GitHub**](https://github.com/haidousm/fine)

A Keras-like **deep learning library** that provides an artificial neural network **Python** interface built from **scratch**.

Built purely using **Python** and **NumPy**. **Fine** allows you to build, train, and deploy neural networks of all kinds thanks to the **implemented-from-scratch** **dense layers, max pooling layers**, **convolutional layers**, and more. Additionally, **Fine** provides multiple activation layers, loss functions, and **state-of-the-art optimizers** such as **Adam**.

**UNIX Shell |** [**Live Demo**](https://haidousm.com/shell) **-** [**GitHub**](https://github.com/haidousm/unix-shell)

Built from scratch using **C,** this project is a fully-fledged UNIX shell with support for all default shell commands, **infinite piping**, and **command chaining.** Additionally, it provides an interface for a couple of **custom shell commands** such as changing directory & retrieving command history.

**SKILLS**

* Languages:

Java, C++, C, Rust, Python, JavaScript, TypeScript, SQL

* Technologies:

NodeJS, Spring Boot, Flask, MongoDB, PostgreSQL, React, Angular, Jenkins, Docker, Git

**RELEVANT AWARDS**

**Judges Award –** World FIRST Tech Challenge Championship **| Inspire Award –** National FIRST Tech Challenge

**1st –** LAU Computer Science Competition **| 2nd –** AUB Science Fair **| 1st –** National World Robot Olympiad