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 - GitHub
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 - GitHub
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