Anthony Fakhoury . Jarvis Consulting

I am a recent graduate with a deep commitment to ongoing learning and a meticulous approach to tasks. Armed with a degree in Electrical and Computer Engineering and a solid foundation in Biomedical Engineering and Engineering Business, I am actively engaged in self-directed initiatives, focusing on Full Stack development, Arduino programming and AI. I am eager to secure a position within your esteemed company to apply and further enrich my knowledge, experiences, and skills. As a dedicated team player and emerging leader, I possess the innate ability to engage and inspire others to achieve their highest potential. My diverse experience includes proficiency in various coding techniques such as agile development, software engineering principles, and fundamental algorithms. This, coupled with my effective communication and leadership skills, positions me well to make a positive impact on the success of your team. During my nearly 16-month tenure at ADI, an environment surrounded by global experts in software and hardware development, I maximized the experience to acquire valuable knowledge, diverse experiences, and sharpen my skills. I became proficient in multiple coding languages, including C, Python, Doxygen, Yoda, and Jinja. This experience honed my teamwork and time management skills, allowing me to successfully manage multiple concurrent projects, including unit test testing, API development, and an automated code rendering program. In essence, this opportunity served as a rigorous training ground that expanded my knowledge across all facets of engineering. My overarching goals were to significantly contribute to various company projects, thereby honoring the university I represent. These goals were not only met but exceeded. My work received accolades from superiors, and I evolved into a reliable team member, offering assistance and guidance to colleagues seeking help with various tasks. I am confident that my blend of skills and experiences positions me as an asset to your team, and I am eager to contribute to the continued success of your organization.

Skills

Proficient: C/C++, Python, Java, Linux/Bash, RDBMS/SQL, Agile/Scrum/SDLC, Git, Jira, Confluence, Testing and Debugging, Critical Thinking, Attention to Detail, Communication/Team Collaboration, Embedded Systems, Network Engineering, Software Development, Hardware Development, System and Network Security, Algorithm Implementation, Database Management

Competent: MATLAB, HTML, Javascript, Verilog, ARM/Assembly, Code Reviews, Engineering Standards, Solution Recommendations, Software Applications, Feature and Application Implementation

Familiar: CSS, jQuery, Bootstrap, Jupyter, AI/ML, Technical Analysis, Technical Documentation and Reporting, Project Documentation, Technical Writing, Oral and Written Communications

Jarvis Projects

Project source code: https://github.com/jarviscanada/jarvis_data_eng_AnthonyFakhoury

Cluster Monitor [GitHub]: Engineered a solution aimed at capturing and logging hardware and usage statistics from server hosts into a PostgreSQL database for real-time monitoring and analysis. This system caters primarily to system administrators and IT professionals, facilitating proactive management of server performance and resource utilization. Leveraging Bash scripting, the system automates data collection using common Linux commands (lscpu, vmstat, df) to gather critical hardware details such as CPU architecture, model, speed, and dynamic usage statistics like memory availability and disk space. PostgreSQL serves as the backbone for persistent data storage and management, ensuring robustness in handling collected data. Version control and collaboration are managed through Git, ensuring efficient tracking and management of project iterations. This streamlined approach enhances infrastructure management capabilities, offering a scalable solution for optimizing system performance and enabling informed decision-making through comprehensive monitoring and analysis.

SQL [GitHub]: Designed to enhance SQL proficiency and prepare for SQL interviews, this project provides hands-on SQL practice for SQL learners and job seekers. The architecture includes database tables for members, bookings, and facilities, utilizing PostgreSQL and Docker for setup. Optional SQL IDEs facilitate query development. Implementation involves rigorous testing methodologies: Manual testing verifies SQL query results, while integration testing ensures compatibility between database schema and queries. Deployment leverages Docker for PostgreSQL instance setup, with GitHub Actions employed for version control and continuous integration. Documentation and progress tracking are managed through a dedicated GitHub repository, ensuring transparency and collaboration throughout the project lifecycle. This structured approach supports comprehensive skill development in SQL and prepares users for real-world SQL challenges and job requirements.

Core Java Apps [GitHub]:

- Twitter App: Curabitur laoreet tristique leo, eget suscipit nisi. Sed in sodales ex. Maecenas vitae tincidunt dui, et eleifend quam.
- JDBC App: Curabitur laoreet tristique leo, eget suscipit nisi. Sed in sodales ex. Maecenas vitae tincidunt dui, et eleifend quam.
- Grep App: Curabitur laoreet tristique leo, eget suscipit nisi. Sed in sodales ex. Maecenas vitae tincidunt dui, et eleifend quam.

Springboot App [GitHub]: Not Started

Python Data Analytics [GitHub]: Not Started

Hadoop [GitHub]: Not Started

Spark [GitHub]: Not Started

Cloud/DevOps [GitHub]: Not Started

Highlighted Projects

Personal github repo [GitHub]: Repo of some of the following non-Jarvis project at https://github.com/TunaFish-1

Brick-Breaker and Snakes & Ladders: Designed and coded classic arcade games on DE1-SOC FPGA: brick-breaker using Verilog and snakes & ladder in C and ARM.

Geo Map: Made a fully interactive map loaded from an API database able to find shortest paths (A*, traveler's salesman, etc.) in C++.

InSoul - Feet Pressure Sensor Mapping: The design is made up of four components: the sensor array, data acquisition (DAQ) board, software, and chassis. These four components are integrated to generate a pressure-based heat map, representing the total pressure of either one or both feet on the sensor. The sensor array was purchased from an external party, but the circuit, PCB, firmware, software, and chassis were all designed internally by InSoul.

Text-conference: Created a basic chat platform (no fancy UI) with a server and multiple clients structure.

Arduino, Esp32 and Raspberry Pi collection of projects: sharpening my engineering skills with a multitude of minor fun and useful projects using a variety of sensors.

Full stack development projects: Developing a collection of minor projects (random-quote-machine, drum-machine, markdown-previewer, etc…)

Professional Experiences

Software Developer, Jarvis (June 2024 - present): During my 3-month tenure at Jarvis, I underwent rigorous training and completed projects led by industry experts. This period significantly enhanced my technical and soft skills. I gained hands-on experience in Linux, SQL, GIT, SDLC, and design patterns. I worked extensively with Java and Spring Boot to develop microservices and REST APIs, and delved into Cloud Computing and DevOps practices. My training also included data analytics using SQL and Python, as well as Big Data technologies such as Hadoop, Spark, and Scala. Collaborating with Tech Leads and professionals, I drastically improved my coding skills in Java, Python, Scala, and SQL. This experience also helped me unlock new potential, boost my confidence, and develop leadership abilities. Furthermore, I attained several industry-recognized certifications, validating my expertise in these areas.

Computer Engineer, Analog Devices Inc. (May 2021 - Aug 2022): I contributed to ADI's latest Direct RF Converter project. This device contains multiple high speed ADCs and DACs along with DSP blocks for a complete system on chip. Our group is responsible for developing customer facing C APIs that allow configuration and control of the device. Some of the projects done are Unit test development, Doxygen implementation, C-API development, YODA register map processing and cataloguing, Guided and assisted the incoming PEY students in various tasks and training.

Education

University of Toronto (2018-2023), Bachelor of Applied Sciences, Electrical and Computer Engineering - Dean's List (Fall 2020, Winter 2021, Fall 2022, Winter 2023) - CGPA: 3.5/4.0 - Graduated with Honors - Major in Computer Engineering - Minor in Engineering Business - Minor in Biomedical Engineering - Served as Class Representative

Miscellaneous

- Supervised Machine Learning: Regression and Classification From DeepLearning.AI and Stanford Online
- Advanced Learning Algorithms From DeepLearning.AI and Stanford Online
- Unsupervised Learning, Recommenders, Reinforcement Learning From DeepLearning.AI and Stanford Online
- Responsive Web Design From freeCodeCamp
- JavaScript Algorithm and Data Structures From freeCodeCamp
- Polylingual: Fluent in English, French, Spanish and Arabic
- Mathematics/Logic: Reward in school mathematics competition Kangourou des Maths as 1st in country
- Karate: 3rd in Kuwait National school Karate Championship
- Football: Won an inter-school competition in soccer
- Guitar: Certified for 4 years of guitar learning
- Singing: Chosen to sing for the inauguration of a children hospital
- Acting: Drama Club and school plays
- Boyscout: Routier and Chef in Scout du Liban guiding 100 kids on the scouts way of life
- Travel and culture enthusiast: Visited and lived in numerous countries covering North and Central America, Europe and Middle-East
- Huge cinephile, music and videogame enjoyer