

# Saliou Diop . Jarvis Consulting

My name is Saliou Diop and I graduated in February 2022 with a B.S. in Applied Computer Science Co-op from Université de Moncton. During my school, I did three coop internships where I learned to collaborate with other team members in creating secure and reliable software solutions. In high school, I had an opportunity to interact with computers. They have been my passion, especially in writing code. The feeling that I can create anything from several lines of code and it could be useful to other people encouraged me to pursue a career as a software developer

## Skills

**Proficient:** C++, Javascript, React, Linux/Bash, RDBMS/SQL, Agile/Scrum, Git, HTML/CSS

**Competent:** Java, NodeJS, Express, Redux, MongoDB, Docker, Sass, Bootstrap, Jest Testing Library

**Familiar:** TypeScript, PHP, Python, Tailwind CSS, Firebase

## Jarvis Projects

Project source code: [https://github.com/jarviscanada/jarvis\\_data\\_eng\\_SaliouDiop](https://github.com/jarviscanada/jarvis_data_eng_SaliouDiop)

**Cluster Monitor** [GitHub]: The purpose of this project is to design and implement a cluster that will help the Jarvis Linux Cluster Administration team to manage multiple Linux clusters running on CENTOS 7. This project is going to allow the LCA to keep track of each node hardware characteristics and monitor resource utilization in real time saved in a relational database management system. This project is built using Linux command lines, Bash scripts, PostgreSQL, Docker and Git.

**Core Java Apps** [GitHub]:

- **Twitter App:** Developed a Java application (Command Line Interface) that can create, read and delete tweets from the CLI using Twitter REST API. The Java app builds the URI required and sends HTTP requests to the API using Apache HTTP components and Signpost OAuth library. The response is return in JSON format. This app is designed following the MVC design pattern consisting of a Model layer, Service layer and a DAO layer. The project is built using Java 11, Maven, JUnit 5 & Mockito, Docker, Twitter REST API
- **JDBC App:** Developed a JDBC apps to perform queries on a PostgreSQL database. The database stores information about customers, products, orders , and salesperson. The CRUD operations are implemented using the Data Access Objects (DAO) and Data Transfer Objects (DTO) pattern.The project is built using Java, Maven, PostgreSQL (running on a docker container), and the JDBC API.
- **Grep App:** Implemented a program to mimic Linux grep commands. The program will read all the files in the current directory and every directory below the current one looking in each file for a given regular expression. The output is written to an output file in the root directory.This project is written in Java (using Streams, Lambda, and RegEx pattern matching), Maven for packaging, and Docker for easy deployment.

**Springboot App** [GitHub]: Not Started

## Highlighted Projects

**Netflix REST API** [GitHub]: Build a Netflix clone REST API that allows you to add movies, series and authenticate a user using Express JS, MongoDB, Mongoose, Json Web Token, Helmet.

**Jobs API** [GitHub]: This API is built to manage careers. It helps people organize their job applications. Once you apply for a job, you can organize and track progress in a central portal. You need to register or log in to use this API.

**Images Gallery** [GitHub]: A web app that uses the Unsplash API to display beautiful images. The user can search for images by keyword, and can also save the images to their collection. The user can also view their saved images. This project is built using React, React-Router, Unplash API, Firebase authentication.

**BLOG** [GitHub]: A blog website that uses MYSQL to store and retrieve data. The admin can create a new post, edit an existing post, and delete a post. He can also create a new user, edit an existing user, and delete a user. This project is built using PHP, HTML, CSS, Javascript, MYSQL and CodeIgniter.

**Detection of Malware Applications in Android Smartphones** [GitHub]: Developed a deep learning model that can detect malware on android smartphones. Achieved an accuracy of 97%.

## Professional Experiences

**Software Developer, Jarvis (2020-present):** Developed an MVP for a Linux Cluster Monitoring agent using Agile techniques, a virtual machine provisioned using Google Cloud Platform, bash scripts, git, Docker, and PostgreSQL. Developed apps in Java to mimic Linux grep command and connect to PostgreSQL database. Performed unit testing using the JUnit library. Participated in daily scrum meetings and weekly code reviews

**Software Developer Intern, Greystone Energy Inc (May 2021-August 2021):** Worked with the operation manager to create dashboards using Javascript, SQL, and Power Bi to evaluate employees' performance. Built reports for the operation manager to understand the data analysis steps, enabling him to take important decisions based on performance.

**C++ programming Tutor, Université de Moncton (Sep 2020-April 2021):** Worked closely with the professor and a few other computer science students to assist junior and sophomore students with C++ programming. Successfully, analyzed and debugged code written by various students and clarified the new concepts introduced in the course.

**Artificial Intelligence Research Assistant, Perception, Robotics and intelligent Machines (PRIME) (Jan 2020-Aug 2020):** Worked with Professor Akhloufi and MSc students to create a simulation tool for forest fires to help prevent propagation. Produced a 3D photorealistic model that can predict effectively fire propagation from parameters such as wind speed, humidity etc.... Used the Unity game engine, C# programming language and state of the art deep learning techniques to build the model

**CS student council treasurer, Université de Moncton (Sep 2020-Sep 2021):** Work with council to prepare the annual budget. Process and record all financial transactions on behalf of the council. Participate in all executive and council discussions and voting

## Education

**Universite de Moncton (2018-2022),** B.S. in Applied Computer Science Co-op., Computer Science

## Miscellaneous

- Soccer