

# Michel Boris Emel Manfouo

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## SUMMARY

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Junior Data Engineer, Data Scientist, and Machine Learning Engineer with a strong mathematical foundation. Proficient in Python, SQL, R, JavaScript, and tools like Apache Hadoop, Spark, and Airflow. Skilled in building scalable data pipelines on GCP and working with Docker for containerization. Expertise in TensorFlow, Scikit-learn, PyTorch, XGBoost, and deploying LLMs. Experienced in data visualization with Tableau, Power BI, and Matplotlib, and managing databases like PostgreSQL, MySQL, and MongoDB. Continuously learning and committed to delivering high-quality results.

## SKILLS

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**Languages:** Java, Python, AppScript, JavaScript, TypeScript, SQL, NoSQL MATLAB, R

**Technologies:** MySQL, PostgreSQL, Cassandra, Spark, Airflow, BigQuery, MongoDB, Git, Docker, AWS, Kubernetes, GCP, Kafka, RabbitMQ, OpenCV, PyTorch, TensorFlow

**Methodologies:** OOP, Functional Programming

## PROJECTS

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### GDP Data ETL Pipeline | [GitHub](#)

- Developed an efficient ETL pipeline to extract GDP data from Wikipedia, transform it into a consistent format, and load it into CSV and SQLite for comprehensive analysis.
- Implemented robust data handling procedures to ensure data accuracy and accessibility, facilitating seamless integration and analysis.

### Largest Banks Data Extraction | [GitHub](#)

- Built an ETL pipeline using Python, BeautifulSoup, Pandas, and SQLite to extract, transform, and load global bank data with multi-currency market capitalization.
- Conducted data analysis with SQL queries and implemented logging to monitor ETL processes.

### Obesity Prediction using Body Mass Index Dataset | [GitHub](#)

- Using preprocessing and advanced supervised learning techniques to predict obesity, emphasizing model interpretability, optimization.
- Developed expertise in feature engineering and model optimization to strengthen threat detection, anomaly identification, and incident response.

### COVID-19 Prediction Model | [GitHub](#)

- Using preprocessing and advanced supervised learning techniques to predict obesity, emphasizing model interpretability, optimization.
- Developed expertise in feature engineering and model optimization to strengthen threat detection, anomaly identification, and incident response.

## EXPERIENCE

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### Limbe City Information Management System

*Data Engineer*

Limbe, Cameroon

*July 2024 – Present, Internship*

- Contributed to the design and implementation of the Limbe City Information Management System (LCIMS), focusing on property-related data management and revenue tracking.
- Developed software modules for data collection, house numbering, and tax identification using Python, Java, JavaScript, and managed databases with MySQL and PostgreSQL.

### Data Collection Support for the SDG AI Lab initiatives

*Data Collector*

UN Development Programme, Turkiye

*Oct 2024 – Present, Volunteer*

- Assisting with the SDG AI Lab's "Tech Volunteers for Resilience" and grant tracking initiatives, focusing on collecting and compiling data related to disaster resilience solutions.
- Ensuring data accuracy and completeness from various sources to support effective decision-making for emergency response and grant distribution efforts.

## EDUCATION

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### Master's Degree, Mathematical Sciences

Cameroon

*African Institute for Mathematical Sciences*

*Aug 2023 – Present*

- Expertise in data science, machine learning, data analysis, and big data analysis, with a strong foundation in Mathematic, statistical modeling, predictive analytics, and data-driven decision-making.
- Proficient in applying machine learning and data engineering techniques for cybersecurity, including the development of behavior-characteristic-based classifiers for credit card fraud detection.

### Master's Degree, Applied Mathematics

Cameroon

*University Of Douala*

*Sept 2019 – Dec 2022*

- Expertise in game theory, with the ability to develop and analyze complex strategies in various contexts.
- Proficient in applying game theory to analyze strategic interactions in cybersecurity, modeling adversarial behaviors, and devising defense strategies to enhance network cybersecurity.

## CERTIFICATES

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### Data Engineering Foundations

*Sept 29, 2024*

[Credential link](#)

### Databases and SQL for Data Science

*Sept 29, 2024*

[Credential link](#)

### Relational Databases (RDBMS) Essentials

*Sept 23, 2024*

[Credential link](#)

### Python Project for Data Engineering

*Aug 9, 2024*

[Credential link](#)

### Generative AI for Everyone

*Nov 21, 2023*

[Credential link](#)

## REFERENCES

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References available upon request.