ANTOINE DJEUKENG MOMO

C++ Systems | Data Processing | Performance-Oriented Engineering

@ antoinedjeukeng@gmail.com +420 732 680 994 Prague, Czech Republic linkedin github

EXPERIENCE

Research Assistant / Software Engineer

University of South Bohemia

2022 – Present Czech Republic

- Implemented data processing pipelines in C/C++ and Python for large-scale molecular simulation outputs.
- Processed high-volume datasets and extracted structured features from noisy data using statistical and numerical methods.
- Identified computational bottlenecks and optimized data handling workflows for improved efficiency.
- Designed reproducible workflows on Linux systems for multi-run simulations and automated analysis.
- Worked in HPC environments, managing parallel executions and large datasets across distributed resources.
- Focused on correctness, validation, and consistency of results across multiple simulation runs.

PROJECTS

Live Trading System (Crypto, USDC pairs)

Python

2025

- Designed and deployed a live trading system processing real-time market data.
- Implemented time-series data pipelines and efficient signal computation using rolling-window statistics (z-score based strategies).
- Built execution logic with risk management (position sizing, stop-loss, take-profit).
- Ensured robustness through logging, state persistence, and failure handling mechanisms.
- Structured the system for reproducibility and iterative testing (backtesting to live deployment).
- Handled state management to avoid duplicate processing and ensure consistent execution across runs.

webserv – HTTP Server

C++

2024

- Handled concurrent connections using non-blocking I/O.
- Implemented an HTTP server in C++ with request parsing, routing, and concurrent client handling.
- Managed low-level networking using sockets and ensured stability under multiple connections.
- Designed modular architecture with clear separation of concerns.

PROFILE

C++-focused developer and Applied Physics PhD candidate with strong foundations in numerical methods, algorithms, and system-level reasoning. Experienced in building data processing pipelines in C/C++ and Python, working with large-scale datasets in Linux environments, and optimizing performance-critical workflows. Interested in low-latency systems, efficient data handling, and robust algorithmic design.

EDUCATION

42 Prague

Software Engineering Program

2024 – Present Prague, CZ

PhD in Applied Physics

University of South Bohemia

2022 – 2026 (exp.) Ceske Budejovice, CZ

MSc in Materials Science

University of Yaounde I

2016 – 2019 Yaounde, CM

SKILLS

C++ (C++17) | C | Python | Linux/Unix | Data Pipelines | Algorithms | Numerical Methods | Performance Optimization | Multithreading (threads, synchronization basics) | Git

LANGUAGES

English (C1)
French (Native)
Italian (B2)