

Graduation Internship Offer: Development of a Scalable, Secure and Reliable RESTful Server / API in C++

Clément Rey - Senior Software Developer at QuanoX

About QuanoX

QuanoX (www.quanox.com) provides live recommendations as a service based on access to big data combined with a strong privacy focus. The aim is to beat the current market in providing better and more relevant recommendations based on a substantial and broad set of data, while placing the consumers in full control of any data related to them. The company is built around business and product development as well as research. The whole team is sitting in Luxembourg with a strong focus on generating a solid product and a great working atmosphere.

Objective of the Internship

The intern will be in charge of designing, implementing, testing and monitoring a REST server/API in C++. In short, we expect from the intern:

- To design the architecture of the server.
- To implement the PUT, POST, GET and DELETE methods for HTTP and HTTPS protocols.
- To implement users' authentication and security mechanisms, such as users access restriction based on database / collection.
- To design and run functional test cases and performance / load test cases (maximum charge, execution time, memory consumption, etc.).
- To implement tools to monitor the incoming traffic.
- To document the project.

Main Technologies:

Programming	Databases	Libraries	Tools
C++11 or greater	NoSQL (MongoDB)	Boost	CMake
Javascript		OpenSSL	Git
Shell Scripting			Jenkins
			Valgrind

If the project is successful, the code might be released as open source.

Profile of the Candidate

- Student in the last year of MSc / Engineering Degree in Computer Science / IT.
- Strong interest and skills in programming.
- Passionate about being part of a start-up company working with machine learning / big data technologies.
- Able to work and communicate in an English speaking environment.

Information

- Duration: approximately 5 months.
- Starting Date: February, March or April 2017.
- Monthly net salary: 1,000€.
- Possibility that the internship could lead to a permanent position.

To apply or if you have any question, please contact Clément Rey at cr@quanox.com.