

# NATHAN RICHARD

Born on 07/06/1991

French nationality

nathan.richard@memento-cloud.fr

(+33)6.98.62.95.49

# UTC STUDENT MASTER OF SCIENCE SPECIALIZED IN ENGINEERING AND COMPUTER SCIENCE

## PROFESSIONAL EXPERIENCE

### CEO/CTO Memento Cloud (2018–now)

Memento Cloud is a startup that develops an innovative data storage technology that uses available space of workstations to perform secure backups of organisations' data. As CEO and CTO, I define the vision of the company and address the technical challenges it faces.

Through Memento Cloud I also conduct consulting and development missions.

### Software Dev/Architect Amadeus (2014–2018)

Amadeus is the lead provider of booking services for the air travel industry. Its systems provide also flight search (shopping) services, that are used for instance by Google Flight. The specific application I worked on, called Availability Processing Engine, ran on a production farm of more than 1000 servers and processed more than 100K TPS.

As a member of the flight search performance task force, I profiled the existing software in search of possible optimization spots, designed and implemented the performance improvements.

For instance I developed a custom cache-aware C++ memory allocator to improve objects creation/deletion performance.

As a member of the application's Architecture Board I reviewed new business requirements and designed the architectural changes needed to implement them.

### Internship at the French Center for Atomic Research (CEA) (2012–2013)

## EDUCATION

### Studies at the UTFSM (2014)

Abroad semester in the Universidad Técnica Federico Santa María in Valparaíso, Chile

### Studies at Compiègne University (UTC) (2009–2014)

Master in computer science. Specialization in software engineering and data processing.

## COMPUTER SCIENCE SKILLS

### Computer Languages

- Python 3
- C/C++
- SQL/PLPqSQL
- Typescript
- Regex
- Html / CSS

### Technologies

- Angular
- PostgreSQL / SQLite
- Websockets
- Coroutines/Threads
- Crypto
- JsonWebToken
- JsonRPC
- JsonSchema
- Material Design
- Kong (API GW)

### Tools and environments

- GNU-Linux
- Docker
- Git
- GCC/GDB
- AWS / GCE
- Valgrind / Jemalloc

### Methodology and good practices

- Agile / Scrum
- Design Patterns
- Modélisation UML
- Propriétés non fonctionnelles (NFR)

## LINGUISTIC SKILLS

**French:** Native

**English:** Read, written, spoken, european level C1, obtained a score of 990 points in the 2013 TOEIC. Used as my main work language (2014 to 2018).

**Spanish:** Read, written, spoken, european level C1

## CULTURAL SKILLS

### Social activities

2012–2013 : Salsa teacher in a student association

2010–2011 : Participation to a humanitarian mission in a Mumbai school

2007 : Participation to an associative radio

### Cultural Activities

Cuban Salsa and latin dances