

Clément Rezvoy

PhD in Computer Science
Senior Software Developer
Junior Team Manager
Rookie Product Owner

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Work Experience

Cosmo Tech, Lyon FR — Software Engineer, Team Lead, and Product Owner

Cosmo Tech is a global software vendor of Enterprise Digital Twin solutions for the industry to simulate and optimize operational efficiency.

May 2014 – Feb. 2017

- Entered Cosmo Tech (*née* The CoSMo Company) as a Software Engineer, Working on the complex system modeling language and simulation runtime, both written mainly in **C++** with bindings in **Java** and **python** ;
- introduced concurrency into the simulation scheduler to allow multi-threaded simulations;
- wrote a build and artifact management system for third party libraries and tools based on **CMake** ;
- introduced the notion of project and dependencies to better handle project life cycle and allow for project composability.

Feb. 2017 – Apr. 2019

- In addition, I became **Team Lead** for my team (5 software engineers). The position grouped the responsibility of both **scrum master** and **manager**;
- Organized the day to day life the team, daily stand-ups, retrospectives. Making sure the workload was appropriately assigned to the members of the team and that the team reached its commitment by the end of the sprint;
- Worked with the product owner to organize and facilitate reviews and backlog groomings;
- management responsibilities, including, weekly one-on one, bi-annual performance reviews, hiring interviews, and synchronization with other teams.

Apr. 2019 – Present

- Currently holding the role of Cosmo Tech's platform **product owner**; platform encompasses the modeling language, the simulation runtime and deployment tools;
- I am in charge of the product backlog, working with the chief product owner, architect and CTO to define the evolution of the platform;
- regular presentations of future and current developments to company management, users and prospects, grooming with dev teams;
- Functionally validating features, overseeing QA and documentation process prior to general availability of new versions.

Qosmos, Paris FR — Software Engineer

Enea Qosmos leads the market for embedded IP traffic classification and network intelligence technology used in physical, SDN and NFV architectures.

Oct. 2011 – Apr. 2014

- worked on high performance, low level **C** code for network optimizations and security;
- reversed engineered and implemented detection routines for network protocols and applications for traffic classification;
- created and led an in depth training program for partners wanting to integrate and use Qosmos' products.

Skills

Software development I have +10 years of experience designing and writing software. I'm independent and can handle and oversee all the stages of software development, from initial design to delivery. I am mostly accustomed with system-level languages (**C**, **C++**) but I have also written substantial projects with scripting languages (**python**, **R**, **Bash**). I have worked in many different environments: distributed systems, near real-time, webapps; I am adaptable, I tend to be quick to pickup a new tech stack.

Team management I can manage a team of developers following and **agile methodology**; I focus on making sure they see the big picture and not only their current ticket.

Product Management I can build from a client request or **from an idea to an actual feature**. I follow the initial requirement through all the steps of the process from inception to completion and delivery. I make sure alignment between management, dev team and users is never lost by communicating regularly on the state of the product.

Communication My teaching experience ranged from Algorithmics in an elite school to Programming 101 for non computer science majors, I learned to **adapt the message the audience** to make sure I am understood. During my PhD I was the link between the Computer Science lab and the genomics lab, I know the importance of **reaching a common understanding** to lead a meaningful discussion. Today as a product owner much of my role is making sure information flows correctly and losslessly from users to developers and back.

Academics & Research

École Normale Supérieure, Lyon FR — PhD, Computer Science
Dissertation: [Large Scale Parallel Inference of Protein and Protein Domain families](#)

Sept. 2007 – Sept. 2011

I used **C++** and **MPI** to create a program to evenly distribute the workload of a large scale biological sequence analysis algorithm across thousands of cpus, while preserving the underlying biological hypotheses of a non trivially parallel problem. I was awarded 400,000 hours of computing time on **CINES** supercomputer and spent countless week-ends and late nights using **grid'5000**, a distributed computing infrastructure.

Sept 2007 – Sept. 2010

During my PhD I also worked as a **teaching assistant** in computer science, I led recitations and practical sessions in: introduction to programming, Systems and Networks, Analysis and design of Algorithms.

Université de Lyon, Lyon FR — MS, Bioinformatics

Master degree in statistical and mathematical modeling of biological systems

Sept 2005 – Jun. 2007

Completed a Master degree in *Approches Mathématiques et Informatique du Vivant*, specializing in sequence analysis. During my first year I wrote the first version of MareyMap, a tool for estimating meiotic recombination rate written in **R**. I published [a paper](#) about it and I also had the opportunity to present my work in poster sessions of several french conferences. Sources have since then been put on [github](#).

Teesside University, Middlesbrough UK — BS, Computer Studies

General degree in computer science with a broad range of subjects covered.

Sept. 2003 – June 2005

Modules studied included: object technology (**Java**), database systems (**SQL**), networks & communications, UI (**HTML**, **Javascript**), operating systems (**C**), real time development, language systems, expert systems, AI (**lisp**), safety and high integrity (**Ada**) systems, and formal Methods (**B method**). I Graduated with a **First Class with Honours**.

Université de Lyon, Lyon FR — AS, Computer Science

University degree, equivalent of an associate degree in computer science with an emphasis on software engineering.

Sept 2001 – June 2003

Completed a *Diplôme Universitaire de Technologie Informatique option génie informatique*. Modules studied included: maths (algebra, linear algebra, probability & statistics), algorithms, UML, programming (**C**), OO-programming (**C++**, **Java**), computer architecture, operating systems, networks, databases (**SQL**), web dev (**PHP**, **Javascript**). I validated My degree with a 3 month internship at University of Staffordshire in Stoke On Trent (UK).

Presentations

JOBIM 2007 French bioinformatics conference. Scientific poster titled: *MareyMap : a R-based tool with graphical interface for estimating recombination rates.*

JOBIM 2010 Presentation titled: *Scalability of large-scale protein domain inference.*

ECCB 2010 European conference on Computational Biology. Presentation titled: *Scalability of large-scale protein domain family inference.*

PhD defense September 2011.

2013, Qosmos training 3-day in-depth workshop.

Cosmo Tech Product Roadmap Bi-annual internal presentation of the state of the product and its future evolutions.

Papers

Daniel Kahn, Clément Rezvoy, and Frédéric Vivien. Parallel large scale inference of protein domain families. In *ICPADS'2008, the 14th IEEE International Conference on Parallel and Distributed Systems*, pages 72–79, 2008. http://ieeexplore.ieee.org/xpls/abs_all.jsp?arnumber=4724305.

Clément Rezvoy. *Large Scale Parallel Inference of Protein and Protein Domain families*. PhD thesis, Ecole normale supérieure de lyon-ENS LYON, 2011. <http://hal.archives-ouvertes.fr/tel-00682495/>.

Clément Rezvoy, Delphine Charif, Laurent Guéguen, and Gabriel A.B. Marais. MareyMap: an R-based tool with graphical interface for estimating recombination rates. *Bioinformatics*, 23(16):2188–2189, 2007. <http://bioinformatics.oxfordjournals.org/content/23/16/2188.short>.