

Xavier Nodet

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June 2011 – Present: Software Development Manager, ##IBM - Managing a team of 10 scientists and software engineers distributed across Europe and the US. Our module, ILOG CPLEX Optimizer, is the #1 Mathematical Programming solver in the world. Definition of the planning and content of the releases. Remote management of the people in the team: hiring, evaluation, compensation, retention.

- Four releases shipped, all within expected timing, scope and resources.
- Leadership position regained on public benchmarks.
- Performance increased by x2.5 on hard models.
- Hired two world-renowned scientists.
- Doubled QA efficiency thanks to continuous builds and tests.
- Presentation at IFORS 2014, Barcelona.

Feb. 2011 - May 2011: Senior Software Engineer, ##IBM - Discover the features, architecture and source code of the ILOG OPL Studio runtime. Help the team reduce technological debt and defect backlog.

- Investigated and implemented a dozen stories and bug fixes (mostly Visual Studio C++).

Feb. 2006 - Feb 2011: Principal Architect, ##ILOG, bought by IBM - Responsible for the architecture and one of the three solving modules of Plant Power Ops, a C++ production planning and detailed scheduling application for the process industry.

- Most customers listed as key factor the Interactive Rescheduling that I invented.
- Large quality increase of the solutions thanks to new solving module.
- Increased team's productivity with smooth but profound architecture changes, and move to SVN.
- Published "Efficient One-to-Many Relations in C++" in CVu, the magazine of ACCU

Sept. 2004 - Jan. 2006: Independent Contributor, ##ILOG - Understand and rewrite the optimization module in ILOG Fab Power Ops (wafer production scheduling, using ILOG Scheduler). Leverage my scheduling expertise in several external consulting activities. Analyze the opportunity and technical feasibility of proposed new ILOG products.

- Saved the first FPO go-live, convincing IBM to market it to its own customers.
- My specifications for a scheduling application for Airbus' assembly lines were successfully implemented.

Nov. 2003 - Aug. 2004: Project Manager, ##ILOG - Designer and team lead for a Microsoft Project addon (C++, C#) using ILOG PSched to assign and schedule tasks while optimizing a number of KPIs. Design and specification of the features suggested by me or the Product Manager.

- Led the two other developers through the implementation of the addon
- Successful focus groups with potential users.
- Project was on time, with planned feature, until canceled 2 months before first public version.

July 1999 - Oct. 2003: R&D Software Engineer, ##ILOG - Software engineer in the ILOG Scheduler team. Lead engineer for ILOG PSched, a C++ library to solve Project Scheduling problems.

- Design of the library ILOG PSched, implementation of its skeleton, documentation
- Lead the ILOG Scheduler engineers implementing several algorithms in the library
- Improve the ILOG Scheduler development processes by rewriting most of the build/test/deliver scripts
- Liaison with the ILOG Concert team: manage the implementation project of Scheduler in Concert, interact with the other R&D teams.
- Responsible for the development of the course material for ILOG Scheduler
- Presentation at JFPLC 2000, Marseille

Oct. 1998 - June 1999: Consulting Team Lead, ##ILOG - Responsible for the scope, planning, implementation and delivery of all the Optimization consulting deals in France. Leading a team of 4 consultants.

- Reduced by 3% Michelin's Europe transportation costs.
- Reduced by 50% the waste ratio of a typical optical fiber cable plant at Alcatel-Câble.

Jan. 1998 - Sept. 1998: Senior Consultant in Resource Optimization, ##ILOG - Design and implementation of several optimization modules using the ILOG Optimization products.

- Integrated a new algorithm in the Capable-To-Match module of SAP's APO.

Feb. 1996 - Dec. 1997: Software Engineer, Optimization specialist, ##Ingénia - Evolutive maintenance, or design and implementation of several optimization modules using various optimization products.

- Designed and successfully implemented a program to compute the optimal yearly purchase plan for a car rental regional agency.
- Successfully implemented the linear programming module of a plant scheduling application for BP.

Postgraduate in IT and Operations Research, Paris VI, pass with honors, October 1995.