

# Javier Nicolás Sánchez

## ***Education:***

- “Master of Science in Computer Science, specialization in Artificial Intelligence” with Distinction in Research – Stanford University, California, USA - 2002
- “Licenciado en Informática with specialization in Systems” (5 year CS degree combining bachelors and specialization) – Blas Pascal University, Córdoba, Argentina - 1998

## ***Work experience:***

[January 2008, present] – Senior Algorithms Engineer Consulting for Quinstreet Inc. – Engineering Division. Starting on January 2008 I moved to Argentina for personal reasons and switched my relationship with the company to an individual contractor keeping my responsibilities and scope of work, which mainly involves leading projects involving research and development of algorithms to maximize return on advertisement spend.

[July 2005, January 2008] – Senior Software Developer at Quinstreet Inc. – Engineering Division. Quinstreet is a leader in Online Direct Marketing, and as such relies heavily on its engineering team to drive its success. As a member of the engineering team my role involves research and development of algorithms to better target customers and maximize returns on advertisement investment. Interactions with both non-technical end users and members of the engineering team are part of my duties, as well as leading the implementation of those features developed within my area of responsibility.

[September 2002, June 2005] – Senior Applications Engineer at Oracle Corporation - APS group (Advanced Planning and Scheduling). As a member of the APS group I was primarily involved in the development of “Oracle Transportation Planning”, an application for computer based generation of shipping plans and detailed vehicle schedules such that total transportation costs are minimized while satisfying time and resource constraints. My involvement with the project was from its initial design and prototyping stages, to delivery of the first commercially available version, as well as being involved in design and coding of its second release.

[April 2001, June 2002] – Research Assistant at the Computational Learning Laboratory, Stanford University, working with Professor Patrick Langley in the area of Computational Scientific Knowledge Discovery. My work concentrated on developing algorithms and methods that allow a synergy between domain scientist and computer program when constructing and revising scientific models based on observed data.

[September 1998, June 1999] – Nuevo Banco de La Rioja S.A. (a bank), Argentina. At this company I participated in a R&D project initiated to evaluate alternatives of expansion and improvement of an existing debit card system using smartcard technology. This project resulted in a new software architecture that could scale to handle merchant transactions from branches distributed around the country (previous pilot project was limited to one city) as well as upgrading the security infrastructure to handle those transactions.

[November 1997, December 1997] – Arcor SAIC, Argentina (a multinational company). Intern in the “Foreign Commerce” division developing decision support software to aggregate and present information from factories and subsidiaries around the world.

[March 1996, August 1996] – Intern in the computer cluster at Blas Pascal University, Argentina. Performed network maintenance tasks and helped with administration of the CS department’s AIX server.

### ***Knowledge areas:***

- Programming languages: C / C++ / Java / Perl / Matlab / SQL. Have been exposed through coursework to x86 assembler, Haskell, and Prolog.
- Object oriented design and programming, UML and software design patterns.
- Artificial Intelligence techniques, with focus in machine learning. Knowledge areas include: statistical learning, pattern classification, data mining, neural networks, Bayesian networks, planning and scheduling, and fuzzy logic.
- Linear and non-linear optimization methods.
- Multi-agent systems and game theory.
- Coursework on database engine design & implementation, operating systems, cryptographic systems
- Coursework and projects in distributed systems, highly-available and scalable internet applications, compilers, and programming language design.

### ***Selected publications:***

- “An Interactive Environment for the Modeling and Discovery of Scientific Knowledge” – Will Bridewell, Javier Nicolás Sánchez, Pat Langley, Dorrit Billman. International Journal of Human-Computer Studies, 64, 1099-1114 (2006).
- “An Interactive Environment for Scientific Model Construction” – Javier Nicolás Sánchez and Pat Langley. In Proceedings of the Second International Conference on Knowledge Capture – ACM Press – Sanibel Island, Florida, USA (2003).
- “A Framework for Interactive Modeling and Discovery of Scientific Knowledge” – Master Thesis with Distinction in Research – Stanford University, California, USA (2002).
- “Robust Global Localization Using Clustered Particle Filtering” – Adam Milstein, Javier Nicolás Sánchez, Evan Tang Williamson. In proceedings of the Eighteenth National Conference on Artificial Intelligence – AAAI Press / MIT Press – Edmonton, Canada (2002).
- “Inducing Process Models from Continuous Data” – Pat Langley, Javier Nicolás Sánchez, Ljupco Todorovski, Saso Dzeroski. In proceedings of the Nineteenth International Conference on Machine Learning – Morgan Kaufmann . Sydney, Australia (2002).

### ***Interests:***

- Artificial intelligence, specially machine learning
- Data mining.
- Optimization.
- Large scale Internet systems.

### ***Awards and academic distinctions:***

- Distinction in research conferred by Computer Science Department, Stanford University (2002).
- Recipient of “Jose A. Estenssoro” 2000 scholarship for graduate studies.
- Presidency of the Nation Award in the area of Computer Science, Systems and Statistics (1998).
- Blas Pascal University Award. to the student with highest GPA of 1998 class.
- Merit medal conferred by the La Rioja State Congress (1998)
- Merit medal conferred by the Córdoba State Congress (1998).
- Young achiever 1997-1998 award conferred by the Mayor of La Rioja city.
- Merit award conferred by the Cordoba Professional Association of Computer Science.