

AGUSTIN SCHAPIRA

EDUCATION

B.S. IN COMPUTER SCIENCE (Valedict.)	Universidad Blas Pascal, Córdoba, Argentina	1995
M.S. IN COMPUTER SCIENCE	University of Massachusetts, Amherst	2000

EXPERIENCE

SOFTWARE ARCHITECT	Knowledge Discovery Laboratory	2002 – 2007
Developer and Lead Architect (2006-) of Proximity, open-source platform for relational knowledge-discovery Project funded and used by DARPA, NSF, Lawrence-Livermore National Laboratory, NASD, and others Co-designed and implemented high-performance data store layer using vertical databases (Java, Monet) Led effort to port the Monet database to the previously unsupported OS X platform (C, Monet, OS X) Implemented QGraph, a graphical query language for graph databases in Proximity (Java, SQL, Monet) Implemented novel relational modeling algorithms for automatic data discovery (Java) Designed and implemented high-level APIs to support general research on knowledge discovery algorithms Coordinated (with others) the release of Proximity as open-source software Managed infrastructure and coordinated development in research laboratory with 6-8 graduate students Guided doctoral students on issues of software design, architecture, and programming in general Incorporated (with others) eXtreme Programming techniques to the development of Proximity Built a hardware and software infrastructure for the efficient execution of research experiments Served as technical contact for collaborations with third-parties interested in Proximity Developed customized solutions based on Proximity for Comcast's Interactive Media Labs See http://kdl.cs.umass.edu/proximity		
SOFTWARE DEVELOPER	Hunt and Gather / McGraw-Hill	2006 - 2007
Co-developed media management and distribution web-site (Ruby on Rails, Ajax)		
SOFTWARE DEVELOPER	Maestro Learning	2004 - 2005
Co-developed interactive educational applets to teach math to children grades 1-5 (Flash, Actionscript)		
SOFTWARE DEVELOPER	IGEN Corporation	2001 – 2002
Co-developed a web-based AI system for automatic generation of customized diets and meal plans (Tcl, Oracle) Co-developed a web application for psychiatric patients and clinicians (Tcl, Oracle, C++) Helped build a screen-saver to display images from customized RSS-like feeds (Tcl, Director, XML)		
WEB DEVELOPER	Care2.com	1999 – 2000
Built an online polling system (PHP, MySQL) Developed The Race for the Rainforest, an online quiz game (PHP, MySQL) Developed an online collaborative calendar (PHP, MySQL)		
WEB DEVELOPER	RIPPLES	1998 – 2001
Wrote database-backed port of an award-winning web-based multimedia course delivery system (PHP, MySQL)		
RESEARCH ASSISTANT	Center for Intelligent Information Retrieval	1998 – 1999
Built an Internet search engine using collaborative filtering techniques (PHP, MySQL) Wrote M.S. Thesis on Collaborative Internet Search Strategies Developed and released open-source code for online, collaborative note keeping (PHP, MySQL) Developed a neural-network system for the analysis of user search data (C++, Mathematica)		
RESEARCH ASSISTANT	Experimental Knowledge Systems Lab	1997 – 1998
Wrote low-level code to control Pioneer Robots for cognitive science experiments (LISP) Awarded Isenberg Scholarship from UMass School of Management		
SOFTWARE DEVELOPER	Perspectivas Sociales	1994 – 1997
Developed a decision-tree system for the analysis of trends in consumer behaviors (LISP) Created a neural-network system for the analysis of socioeconomic data (C++) Built a database and statistical system for the automatic analysis of survey data (C++, Visual Basic)		
SOFTWARE DEVELOPER	Centro de Investigación Martín Ferreyra	1993 – 1995
Developed a computer vision system for the identification of brain cells in microscopy images (C++) Won First Prize at nation-wide Conference on Computer Science		

TEACHING EXPERIENCE

TEACHING ASSISTANT (UMASS)	Introduction to Data Structures	1998
TEACHING ASSISTANT (PASCAL)	Decentralized Systems, AI, Numerical Analysis	1994 - 1996

References available upon request

See also <http://www.cs.umass.edu/~schapira>