

Curriculum Vitae

Mauricio Monsalve

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Education

- 2007 – Today Master of Science in Computer Science, candidate. Universidad de Chile.
2006 – 2007 Computer Engineer, professional degree. Universidad de Chile. *Graduated with honors.*
2001 – 2006 Bachelor of Science in Computer Science and Engineering. Universidad de Chile.

Professional Experience

- 2005 – 2008 Independent game developer. *Developed many mobile phone games in Java ME. These games are being distributed in Latin America.*
- Mar 2006 – Jun 2006 Head engineer (supervised internship). Tastets System. *Developed a truck fleet following system for mobile phones, Blackberry, and Imate devices. It involved GPS technology and reported gas levels, engine activity, speed, direction, and temperature, in real time.*
- Dic 2005 – Mar 2006 Programmer and systems administrator (internship). Andinatech. *In charge of process automatization, a NIS/NFS system, backups, and website development.*
- Sep 2005 – Dic 2005 PHP Programmer. External projects division, Department of Industrial Engineering, Universidad de Chile. *Implementation of modules for a corporate ERP system.*
- Dic 2004 – Feb 2005 C Programmer (internship). Center for Mathematical Modeling, Universidad de Chile. *Development of a parallel software for the computation of the markovian traffic equilibrium for a given city. <http://www.springerlink.com/content/e8r070u48p487112/>*

Honors and Awards

- 2002 – 2004, 2006 Beca Institucional para hijo de colaborador, Banco de Crédito e Inversiones. (Institutional Scholarship for employee's dependants.) *This grant awards outstanding academic performance.*
- 2001 – 2006 Outstanding student, Universidad de Chile. *This honor acknowledges students with average scores above 5.7/7 or in the top 5% of their class.*
http://escuela.ing.uchile.cl/escuela/a_destacados.htm

Academic Experience

- 2004 – 2008 Teaching assistant: CC42A/CC55A Databases. Department of Computer Science, Universidad de Chile. *Lecturing, and test and homework grading. Spring 2008, fall 2008, spring 2007, fall 2007, spring 2005, fall 2005, spring 2004.*
- Fall 2007 Teaching assistant: CC10B Introduction to Software Engineering and Computer Science. Department of Computer Science, Universidad de Chile. *Test and homework grading.*
- Fall 2007 Teaching assistant: IN50A Organizational Behavior and Human Resource Management. Department of Industrial Engineering, Universidad de Chile. *Test and homework grading.*
- Spring 2005 Teaching assistant: IN42A Project Preparation and Valuation. Department of Industrial Engineering, Universidad de Chile. *Test and homework grading.*
- 2004 Physics teacher. Preuniversitario social Belén, Quilicura.

Publications

- Nov 2007 M. Monsalve. Managing the QoS of E-Government: Metrics for Large Scale SOA. XXVI International Conference of the Chilean Computer Science Society (SCCC 2007), 8-9 November 2007, Iquique, Chile. Published by IEEE Computer Society.
<http://doi.ieeecomputersociety.org/10.1109/SCCC.2007.13>

Oct 2007 C. Gutierrez, M. Monsalve. Fast inverse for big numbers: Picarte's iteration. DCC Technical Report TR/DCC-2007-9.
<http://www.dcc.uchile.cl/1877/propertyvalue-11449.html>

Note: This list might increase in the short term. Visit <http://www.dcc.uchile.cl/~mnmonsal/> for updated information.

Working Papers

(In progress) M. Monsalve. The network of investments between Chilean firms. (The title might change, and this work might lead to several papers.)

Theses

(In progress, almost complete) Modelo de decrecimiento en redes sociales complejas: el caso del mercado de valores chileno. (A decreasing model in a complex social network: the case of the Chilean shareholding network.) *MSc thesis. It involved several methods for relating topological and non-topological aspects of network data while studying the behavior of the Chilean trading market as a shareholding network.*

2006 Métricas para la interoperabilidad de la información en el Gobierno Electrónico, énfasis en el caso chileno. (Information interoperability metrics in E-Government, focus on the Chilean case.) *Engineering thesis. It defined several quality of service measures for the evaluation and management of web service architectures. It lead to a paper in 2007.*

Books

Fall 2008 Compiler and designer of the book "Cómo Funciona la Web" of the Center for Web Research. ISBN: 978-956-319-225-1. Printed by Gráfica LOM.
Available online: <http://www.ciw.cl/libroweb/>

Research Projects

2007 Millennium Science Initiative, MIDEPLAN (Ministry of Development and Planning), P04-067-F: Millennium Nucleus Center for Web Research. *Funding for my MSc Thesis.*
<http://www.cwr.cl> <http://www.ciw.cl>

Spring 2006 FONDECYT (National Fund for the Scientific and Technological Development) Project 1050642: Procesamiento y Análisis de Servicios Web (Web Service Analysis and Processing). *Funding for my Engineering Thesis.*
<http://ri.conicyt.cl/575/propertyvalue-66563.html>

Additional information

Programming languages: C, C++, Java SE, Java ME, Perl, PHP, JavaScript

Operating Systems: GNU Linux (preferred), Windows, Solaris

Core technical strengths: Algorithms, databases, simulation, optimization, video games, modeling and design, cross platform software engineering