

Andrés A. Aristizábal P.

Curriculum Vitae

Address: Pontificia Universidad Javeriana
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Date of birth: 16 Feb. 1982
Nationality: Colombian
Civil Status: Single

Education

PhD in Computer Science **2009-2012**

University: École Polytechnique of Paris

Supervisors: Catuscia Palamidessi and Frank D. Valencia

Title: Bisimulation Techniques and Algorithms for Concurrent Constraint Programming

Defense: 17 October 2012

Grade: Très honorable

Postgrade: Specialization in Journalism **2006-2007**

University: Universidad de los Andes (Bogota-Colombia)

Five years of Bachelor (equivalent to bachelor+master) **2000-2005**

University: Pontificia Universidad Javeriana Cali-Colombia

Honors: Honor to the human and academic excellence

Average Grade: 4.32/5.0 (Excellent)

Bachelor's Thesis **2006**

University: Pontificia Universidad Javeriana Cali-Colombia

Supervisors: Camilo Rueda and Frank D. Valencia

Title: Using Process Calculi to Model and Verify Security Properties in Real Life Communication Protocols

Honors: Magna-Cum-Laude

Grade: 5.0/5.0 (Excellent)

International Baccalaureate (IB) Diploma **1999-2000**

Educative Institution: International Baccalaureate Organization Geneva-Switzerland

Scientifique Baccalaureate (International Version) **1994-2000**

Educative Institution: Colegio Colombo Británico Cali-Colombia

Honors: Honorable mention in all subjects, excellence in mathematics, excellence in literature

Research Interests

Formal methods
Concurrency Theory
Process Calculi
Concurrent constraint programming
Formal semantics
Bisimulation
Reactive Systems
Model checking
Security

Work Experience

- Researcher at Avispa Research Group** **2013-?**
Place: Pontificia Universidad Javeriana Cali-Colombia
Project: REACT+: Robust theories for Emerging Applications in Concurrency Theory. Funded by Colciencias, the Pontificia Universidad Javeriana, IRCAM and the École Polytechnique of Paris.
- Lecturer** **2013-?**
Place: Pontificia Universidad Javeriana Cali-Colombia
Lecture: Introduction to Programming
- Research Assistant at Avispa Research Group** **2008-2009**
Place: Pontificia Universidad Javeriana Cali-Colombia
Project: FORCES: FORmalisms from Concurrency for Emergent Systems
- Research Assistant at Avispa Research Group** **2007-2009**
Place: Pontificia Universidad Javeriana Cali-Colombia
Project: REACT: Robust theories for Emerging Applications in Concurrency Theory
- Intern at LIX for three months** **2005**
Place: LIX École Polytechnique of Paris
Title of internship: Using Process Calculi to Model and Verify Security Properties in Real Life Communication Protocols
- Research Assistant at Avispa Research Group** **2005-2006**
Place: Pontificia Universidad Javeriana Cali-Colombia
Project: Using Process Calculi in Problems in Science and Technology
- Teaching Assistant** **2003-2004**

Place: Pontificia Universidad Javeriana Cali-Colombia

Lecture: Formal methods

Teacher: Camilo Rueda

Grants

Research Grant from CNRS and DGA

2009

Three years research grant to support the PhD

Participation in scientific events

- 27th Symposium On Applied Computing SAC 2012** March 26-30, 2012
Riva del Garda-Fierecongressi, Riva del Garda, Italy
- International Spring School in Formal Languages and Applications** April 18-22, 2011
Tarragona, Spain
- 21st International Conference on Concurrency Theory** August 31- September 3, 2010
Paris, France
- ICLP 2010** July 16-19, 2010
University of Edinburgh, Edinburgh, Scotland
- 10th International School on Foundations of Security Analysis and Design** June 21-26, 2010
University Residential Center of Bertinoro, Bertinoro, Italy
- Comète Parsifal Seminar** May - June, 2005 and 2009-2012
LIX, École Polytechnique, Paris, France
- Latin American Conference on Informatics** October 10-14, 2005
Pontificia Universidad Javeriana Cali, Colombia
- Workshop On the Link between formal and computational models** June 23-24, 2005
École Normale Supérieure, Paris, France
- Multimedia Cali** February 2004
Pontificia Universidad Javeriana Cali, Colombia
- Campus VR v1.0** November 2003
Pontificia Universidad Javeriana Cali, Colombia

Languages

Spanish (native)

English (advanced)

French (upper-intermediate)

Polish (beginner)

Publications

- [1] PhD Thesis: Bisimulation Techniques and Algorithms for Concurrent Constraint Programming. 2012. École Polytechnique of Paris.
- [2] A. Aristizabal, F. Bonchi, L. Pino, F. Valencia. Reducing Weak to Strong Bisimilarity in CCP. In proceedings of ICE 2012 2-16
- [3] A. Aristizabal, F. Bonchi, L. Pino, F. Valencia. Partition Refinement for Bisimilarity in CCP. In proceedings of SAC 2012
- [4] A. Aristizabal, F. Bonchi, C. Palamidessi, L. Pino, F. Valencia. Deriving Labels and Bisimilarity for Concurrent Constraint Programming. In proceedings of FoSSaCS 2011
- [5] Andres A. Aristizabal P. Bisimilarity in Concurrent Constraint Programming. In Young Researchers Workshop on Concurrency Theory 2010. (Short Paper), 2010.
- [6] Andres A. Aristizabal P. Bisimilarity in Concurrent Constraint Programming. In ICLP 2010 (Technical Communications) 236-240 (Short Paper), 2010.
- [7] B.Sc. Thesis: Using Process Calculi to Model and Verify Security Properties in Real Life Communication Protocols. , 2006. Pontificia Universidad Javeriana Cali.
- [8] A. Aristizabal, H. Lopez, C. Rueda, F. Valencia. Formally Reasoning About Security Issues In P2P Protocols: A Case Study In S. Cruz-Lara and Y.-K. Tsay, editors, Third Taiwanese-French Conference on Information Technology (TFIT) Nancy, France 2006. ISBN 2-905267-48-8
- [9] The Challenge of the Modelling Collaborative Protocols Using SPL. AVISPA Research Group. Feb 2006.
- [10] Modelamiento de Protocolos de Seguridad Temporal y Listas Negras usando SPL. AVISPA Research Group. Feb 2006.
- [11] A. Aristizabal, H. Lopez, C. Rueda. Using a Declarative Process Language for P2P Protocols. Association for Logic Programming Newsletter Digest, Vol. 18, No. 4, Nov. 2005.
- [12] A. Arbelez, A. Aristizabal, J. Gutierrez, H. A. Lopez, J. A. Prez, C. Rueda, and F. D. Valencia. Process Calculi to Analyze Emerging Applications in Concurrency. Association for Logic Programming Newsletter Digest, Vol. 18, No. 4, Nov. 2005.

Talks

- Bisimulation Techniques and Algorithms for Concurrent Constraint Programming. PhD Defense. École Polytechnique of Paris. Paris, France. October 17, 2012.
- Partition Refinement for Bisimilarity in CCP. In SAC 2012. Riva del Garda, Italy.
- Bisimilarity in Concurrent Constraint Programming. In Young Researchers Workshop on Concurrency Theory 2010. Paris, France.
- Bisimilarity in Concurrent Constraint Programming. In ICLP 2010. Edinburgh, Scotland.

- Representing CCP with Hybrid Event Structures, RESACA: RESearch in Avispa: Concurrency Theory and Applications. Pontificia Universidad Javeriana Cali, Colombia. Jan 2009.
- Using Process Calculi to Model and Verify Security Properties in Real Life Communication Protocols. Thesis Disertation. Ponticia Universidad Javeriana - Cali, Colombia. January 25, 2006.
- An Introduction to SPL Comète Parsifal Seminar. LIX, Ecole Polytechnique, Paris, France 2005.