

# Daniel Bolaños

## Personal Data

Contact information:

- **Boulder Language Technologies, Boulder, CO, USA.** |  
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- **Center for Computational Language and EducAtion Research (CLEAR)** ,  
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## Research Interests

- Large Vocabulary Speech Recognition
- Search methods for speech decoding
- Children's Speech Processing
  - Reading assessment
  - Pronunciation assessment
- Large Margin Methods applied to Speech Processing
- Dialog Systems, VoiceXML, VoIP.
- Automated Software testing.

## Academic and Professional Positions

- January 2009 – : Research Associate at the **Center for Computational Language and EducAtion Research (CLEAR)**, Computer Science Department, University of Colorado at Boulder, USA.
- January 2009 – : Postdoctoral position at **Boulder Language Technologies**, Boulder, CO, USA.
- October 2008 – January 2009: Teaching Assistant, Department of Computer Science, Universidad Autónoma de Madrid, Spain.

- June 2008 – September 2008: **Research Intern at the Microsoft Research Speech Group** in Redmond (Washington), USA.
- October 2004 – 2006: Teaching Assistant, Department of Computer Science, Universidad Autónoma de Madrid, Spain.

## Education

- November 2008: **Ph.D. Computer Engineering and Communications**, Universidad Autónoma de Madrid, Spain. Thesis supervisor: Wayne H. Ward. Thesis title: “Advances in the Application of Support Vector Machines as Probabilistic Estimators for Continuous Automatic Speech Recognition”.
- June 2006 – June 2008: Visitor Scholar at the Center for Spoken Language Research, Colorado University at Boulder, CO. USA.
- 2004 – June 2006: Ph.D. Student. Computer Engineering and Communications, Universidad Autónoma de Madrid, Spain.
- 2002-2004: **Master (Honors) in Computer Engineering and Communications**, Universidad Autónoma de Madrid, Spain.
- 1998-2002: **Bachelor in Computer Engineering and Communications**. Universidad Autónoma de Madrid, Spain.

## Published books

- D. Bolanos, I. Alarcon y A. Sierra “**Pruebas de software y JUnit, un análisis en profundidad y ejemplos prácticos**” (English translation: “Software testing and JUnit, an in-depth analysis and practical examples), **Pearson Educación (Prentice-Hall)**, ISBN: 978-84-8322-354-3. 343 pages.

## Published book chapters

- Book title: “**Software Engineering: Effective Teaching and Learning Approaches and Practices**” An Idea Group book edited by Dr. Heidi J. C. Ellis, Dr. Steven A. Demurjian, and Dr. J. Fernando Naveda. ISBN: 978-1605661025, Chapter: D.Bolanos and A. Sierra. “**Integrated Software Testing Learning Environment for Training Senior-Level Computer Science Students**”.
- Book title: “**Software Applications: Concepts, Methodologies, Tools, and Applications**”, An Idea Group book edited by Pierre F. Tiako, Langston University, USA. ISBN: 978-1-60566-060-8

## Recent articles

- **D. Bolanos**, Wayne H. Ward and Ronald A. Cole, "A Reference Verification Framework and its Application to a Children's Speech Reading Tracker". In Proceedings of ICMI-MLMI'09 Workshop on Child, Computer and Interaction November 5, 2009, Cambridge, MA, USA.
- **D. Bolanos**, Wayne H. Ward and Ronald A. Cole, "A Reference Verification Framework and its Application to a Children's Speech Reading Tracker". In Proceedings of ICMI-MLMI'09 Workshop on Child, Computer and Interaction November 5, 2009, Cambridge, MA, USA.
- **D. Bolanos**, G. Zweig and P. Nguyen, "Multi-scale Personalization for Voice Search". In Proceedings of NAACL HLT 2009, May 31-June 5, 2009. Boulder, Colorado (USA).
- **D. Bolanos** and W.H. Ward, "SVM-based Posterior Probabilities for Syllable Confidence Annotation", In Proceedings of V Jornadas en Tecnologia del Habla. November 12-14 2008. Bilbao, Spain.
- **D. Bolanos**, W. H. Ward, B. Wise and S. Van Vuuren, "Pronunciation Error Detection Techniques for Childrens Speech". In Proceedings of Interspeech 2008, September 22-26. Brisbane, Australia.
- **D. Bolanos** and W. H. Ward, "Implicit State-Tying for Support Vector Machines Based Speech Recognition". In Proceedings of Interspeech 2008, September 22-26. Brisbane, Australia.
- **D. Bolanos** and W.H. Ward , Sarel Van Vuuren and Javier Garrido, "Syllable lattices as a basis for a Children's Speech Reading Tracker", Interspeech 2007, August 27-31, 2007, Antwerp, Belgium.
- **D. Bolanos** and W.H. Ward, "Posterior Probability Based Confidence Measures Applied to a Children's Speech Reading Tracking System", NODALIDA 2007, the 16th Nordic Conference of Computational Linguistics, Tartu, (Estonia), May 25-26 2007.