

Dr. Roberto Ulloa

Profile

Computer scientist, PhD in Computer Social Simulations, MSc and BSc with Distinction

Areas of interest: Statistics, Data Science, Machine Learning, Natural Language Processing, Computer Simulations, Text Analysis, Computational Biology, Computational Social Science

Languages and technical skills

Programming Languages: Python, R, Java, Octave/Matlab, PHP, C++, Netlogo

Web Developing/Platforms: HTML, CSS, Javascript, Django, Bootstrap, Wordpress

Databases: MySQL, PostgreSQL, SQLite

Others: Computer simulations, experimental design, data analysis, graph analysis, statistics

Education

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| 09/2011 – 12/2016 | Western University, Canada
PhD in Computer Simulations (90,29%)
<i>Thesis: The resilience of cultural diversity in agent-based systems and the role of institutional influence</i> |
| 03/2009 – 03/2011 | University of Costa Rica, Costa Rica
MSc with Honors in Computer Science (Summa cum Laude, 94.5%)
<i>Thesis: Use of randomization as a defense mechanism against inference of strategies in agent-based systems</i> |
| 03/2002 – 03/2006 | University of Costa Rica, Costa Rica
Bachelor with Honors in Computer Science (Magna cum Laude, 91.2%) |

Experience

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| 05/2016 – present | School of Computer Science and Informatics, University of Costa Rica
Researcher , <i>Application of de-anonymizing tasks to increase individuals' perceptions of privacy threats</i> , with Prof. G. Barrantes |
| 10/2014 – 12/2016 | Dpt. of Computer Science and Artificial Intelligence, University of Seville, Spain
Researcher; data analyst and developer (Java/Netlogo/R) , <i>Cultural diversity in agent-based systems</i> , with Prof. F. Sancho |
| 03/2015 – 07/2016 | Applied Mathematics and Systems Research Institute, Autonomous National University of Mexico (UNAM)
Researcher; data analyst and developer (Python/R) , <i>Computer models for social systems using game theory (PAPIIT IA102415)</i> , with Prof. T. Froese |
| 05/2015 – 08/2015 | Mitacs, Canada
Globalink Mentor , <i>Mentorship of international research interns</i> |
| 06/2013 – 12/2015 | Western University, Canada
Researcher; data analyst and developer (Javascript/CreateJS/CSS/HTML/R) , <i>Cognitive psychology</i> , with C. Kacperski & Prof. C. Hall |
| 05/2013 – 11/2013 | Commas and Industry, Malaysia
Web Developer (HTML/CSS, Python, DjangoCMS, PHP, WordPress) |
| 09/2011 – 04/2013 | Cultural Complexity Laboratory (CulturePlex), Western University, Canada
Computer Scientist, Frontend and backend developer (Django/Python/HTML/SQL/tesseract/grammar constructions) ,
<i>(1) Festos: an infrastructure for scanning, OCR'ing, indexing and searching texts</i>
<i>(2) Virtual assistant of language based on Natural Language Processing (NLP)</i> |

- 11/2007 – 03/2011 School of Computer Science and Informatics, University of Costa Rica
Researcher; data analyst and developer (Java/SQL/R), *Using diversity for security in multi-agent systems*, with Prof. G. Barrantes
- 04/2008 – 06/2010 School of Computer Science and Informatics, University of Costa Rica
Lecturer of Computer Networks, Programming II (C++), Programming I (Java), Principles of Informatics, Microsoft Office and Internet Services
- 11/2007 – 12/2009 Graduate Office/Center of Attention to Students with Disability/Volunteering Office, University of Costa Rica
Web application and server administrator (Drupal, Limesurvey)/Developer (Access/SQL)/Frontend and backend developer (HTML/CSS, PHP/MySQL)
- 03/2007 – 09/2007 Society for Wildlife Research and Environmental Education (SPVS), Brazil
Developer (Java/PostgreSQL)
- 09/2006 – 12/2006 National Social Security and Health Library (BINASSS), Costa Rican Social Security System (CCSS), Costa Rica
Server administrator (Linux Debian Servers)
- 08/2006 – 11/2006 School of Computer Science and Informatics, University of Costa Rica
Researcher, *Analysis of security vulnerabilities*, with Prof. G. Barrantes
- 12/2005 – 06/2006 United Nations Volunteers (UNV), UN Development Program (UNDP), Guatemala
IT Specialist, Knowledge Transfer
- 03/2005 – 11/2005 Department of Computer Science, University of Costa Rica
Network assistant (Web server configurations, network management, user support, physical installations)

Scholarships, Awards and Distinctions

- 08/2016 **Graduate Research Scholarship (GRS)** - C\$6350, Western University, Canada
- 04/2016 **Graduate Thesis Research Award (GTRA)** - C\$1000, Western University, Canada
- 04/2015 **Ontario Graduate Scholarship (OGS)** - C\$15000, Ontario, Canada
- 04/2015 **Graduate Thesis Research Award (GTRA)** - C\$1000, Western University, Canada
- 03/2015 **Mitacs Globalink Research Award** - C\$4350, Western University, Canada
- 09/2013 **Award of Excellence**, USC Teaching Honor Roll, Western University, Canada
- 04/2011 **M.Sc. graduation with Honors (Summa Cum Laude)**, University of Costa Rica
- 03/2011 **Provost's Entrance Scholarship** - C\$4000, Faculty of Arts and Humanities, Western University, Canada
- 03/2011 **Western Graduate Research Scholarship (WGRS) & Graduate Teaching** - C\$30000 per year (2011-2013/2014-2016), Faculty of Arts and Humanities, Western University, Canada
- 03/2009 **Graduate Honor Scholarships**, yearly tuition waiver (~ \$5000 yearly) for average above 90 out of 100, University of Costa Rica
- 03/2011 **B.Sc. graduation with Honors (Magna Cum Laude)**, University of Costa Rica
- 03/2009 **Undergraduate Honor Scholarships**, yearly tuition waiver (~ \$4000 yearly) for average above 90 out of 100, University of Costa Rica
- 12/2001 **Honorable Mention**: 12th out of 21.038 in the admission test, University of Costa Rica

Engagement and Interests

- 12/2016 – present Machine Learning Online Course (with Andrew Ng), Stanford University, Coursera
- 12/2016 – present Heidelberg Python Meetup Group
- 09/2010 – 04/2011 Raleigh International - Costa Rica & Nicaragua (raleighinternational.org)
Project Manager (2010) / Expedition Administrator (2011)
- 2003 – 2010 Volunteer Program of the University of Costa Rica (voluntariado.ucr.ac.cr)

Languages

Languages: English (fluent), German (active learner), Portuguese (fluent), Spanish (native)