CRISTINA POP

Stanford, CA, USA
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EDUCATION

2008-present ***Doctor of Philosophy (PhD) Candidate, Computer Science***
Stanford University
Degree Expected: *December 2014*
Interests: *Probabilistic Models, Machine Learning, Computational Biology*

2003-2008 ***Bachelor of Applied Science (BASc), Computer Engineering, Honours Mathematics Option***
The University of British Columbia (UBC)
Degree Conferred: *May 2008 with Distinction*
Ranked:
1 of 118 students in Year 4, Electrical and Computer Engineering
2 of 250 students in Year 3, Electrical and Computer Engineering
3 of 375 students in Year 3, Faculty of Applied Science

PROFESSIONAL & RESEARCH EXPERIENCE

2013 Aug-Oct ***Software Engineering Intern***, Google, Mountain View
- Machine learning algorithms for ad click through rate prediction (C++)

2011 Aug-Oct ***Software Engineering Intern***, Microsoft Research, Los Angeles
- Sequence assembly algorithms for polyploid organisms (C#, C++)

2010 Jan-Mar ***Course Assistant***, Probabilistic Graphical Models, Stanford

2009 Apr-Jun ***Course Assistant***, Senior Software Project, Stanford

2009 Jan-Mar ***Course Assistant***, Computational Genomics, Stanford

2008-present ***Research Assistant***, Computer Science, Stanford. Supervisor: Dr. Daphne Koller
- Probabilistic models for translation of RNA (Matlab, C++)
- Statistical models and algorithms for RNA folding prediction (Matlab, C++)
- Prediction of regulatory modules for gene expression (Matlab)
- Analysis of translation quantitative trait loci

2008 May-June ***Research Assistant***, Computer Science, UBC. Supervisor: Dr. Anne Condon
- Energy models for RNA folding (C++)

2007 May-Aug ***Undergraduate Student Research Award Recipient***, Computer Science, UBC, awarded by Natural Sciences and Engineering Research Council of Canada (NSERC). Supervisor: Dr. Anne Condon
- Energy models for RNA folding (C++)

2007 Jan-Apr ***Undergraduate Teaching Assistant***, Honours Integral Calculus, Mathematics, UBC

2006 May-Aug ***Undergraduate Student Research Award Recipient***, Computer Science, UBC, awarded by NSERC. Supervisor: Dr. Anne Condon.
- RNA folding prediction algorithm (Haskell, C++)

2006 Jan-Apr ***Undergraduate Teaching Assistant***, Linear Systems, Mathematics, UBC

2004 May-Aug ***Undergraduate Student Research Award Recipient***, Mathematics, UBC, awarded by NSERC. Supervisor: Dr. Joel Friedman
- Software to model and test the Ramanujan property of graphs (C++, Matlab)

PUBLICATIONS & CONFERENCES

2013 "Analysis of the regulatory features guiding translation of RNA into protein"
Cristina Pop. Rising Stars in EECE Workshop, MIT, Boston, Nov 4-5. Poster Presentation

2012 "Towards Copy-Aware Assembly of the Sugarcane Genome"
Gabriel R.A. Margarido, ***Cristina Pop***, Bob Davidson, Glaucia Souza, and David Heckerman.
Sugar Cane Sequencing Initiative Workshop, Plant and Animal Genome XX Conference, San Diego, CA

2010 "Analysis of the regulatory landscape affecting translational efficiency"
Cristina Pop, Nicholas Ingolia, Jonathan Weissman, and Daphne Koller.
Translational Control Meeting, Cold Spring Harbor Laboratory, NY. Poster Presentation

2010 **"**Analysis of the regulatory landscape affecting translational efficiency"
Cristina Pop, Nicholas Ingolia, Jonathan Weissman, and Daphne Koller.
Biomedical Computation at Stanford Symposium. Selected Talk ***(3rd best talk award)***

2010 "Improved free energy parameters for RNA pseudoknotted secondary structure prediction"
Mirela Andronescu*, ***Cristina Pop****, and Anne Condon. (*equal contributions)
RNA Journal 16(1): 26-42

2007 **"**HFold: RNA Pseudoknotted Secondary Structure Prediction Using Hierarchical Folding"
Hosna Jabbari, Anne Condon, Ana Pop, ***Cristina Pop***, and Yinglei Zhao.
7th Workshop on Algorithms in Bioinformatics (*WABI*), Philadelphia, USA
Algorithms in Bioinformatics, Lecture Notes in Computer Science (LNCS) 4645: 323-334

ACADEMIC AWARDS & DISTINCTIONS

2010 National Science Foundation (NSF) Graduate Research Fellowship, Stanford University
- Awarded to outstanding US graduate students in science, technology, engineering, and math.

2008 Faculty of Applied Science Prize for Academic Excellence, UBC
- Awarded to 1 out of ~600 graduating UBC students in the Faculty of Applied Science.

2008 Computing Research Association Outstanding Undergraduate Award - Honorable Mention
- Awarded to North American undergraduates with outstanding potential in computing research.

2008-2009 Natural Sciences and Engineering Research Council of Canada Postgraduate Scholarships: Alexander Graham Bell Canada Graduate Scholarship (declined) and Postgraduate Scholarship M
- Canada Graduate Scholarship awarded to top-ranked Postgraduate Scholarship applicants, for academic excellence, research potential, and communication / interpersonal / leadership skills.

2006 PMC-Sierra Founders Award in Electrical and Computer Engineering, UBC
- Awarded to 1 UBC electrical / computer engineering student for academic achievement, entrepreneurship, leadership, interest in integrated circuit and communication system design.

2006 Microsoft Technical Scholarship
- Awarded to students studying in the United States, Canada, and Mexico, who show passion for software and academic excellence.

2005 MDSI Mobile Data Solutions Inc. Peter Kam Memorial Scholarship, UBC
- Awarded to 1 out of ~400 UBC electrical / computer engineering students in 3rd or 4th year.

2004 Leslie and Greta Carter Memorial Engineering Scholarship, UBC
- Awarded to 1 out of ~600 UBC students entering 2nd year engineering.

2003-2007 IBM Canada Limited Pacific Development Centre Scholarship
- Awarded annually to 10 Canadian students entering a BC university in fields in computing.

VOLUNTEER ACTIVITIES

2014 Workshop Leader, "Computational Biology", Stanford Pre-Collegiate Science Conference

2008-2014 President (2011-2013), Vice President (2013-2014), and Secretary (2008-2011), Women in Computer Science, Stanford University