

Hamid Mirebrahim

PhD candidate
Department of Computer Science and Engineering
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Education	PhD in Computer Science CSE Department, University of California, Riverside, CA. Advisor: Dr.Stefano Lonardi	2015 (expected)
	M.S in Information Technology (Computer networks) Amirkabir University of Technology, Tehran, Iran. Advisor: Dr.Mehdi Dehghan Takhtfooladi	2009
	B.S in Computer Sciences Shahid Beheshti University, Tehran, Iran.	2006
Research Interests	Computational biology, Data mining, Machine Learning	
Technical Skills	<i>Programming languages:</i> C++, MATLAB, Python, Shell script, C#, Java, Perl, Prolog <i>Bioinformatics tools:</i> Experienced in common bioinformatics packages and tools, especially next generation sequencing data manipulation and analysis software <i>Operating systems:</i> Linux, MacOS, Windows <i>Computer software and frameworks:</i> SQL, Microsoft .Net, Taverna, WEKA, Opnet, GloMoSim, ...	
Honors & Awards	ACM scholarship SIAM scholarship Dean's Distinguished Fellowship, Department of Computer Science, UCR Ranked in top 0.01%, Nationwide universities entrance exam (M.S degree) Ranked in top 0.005%, Nationwide universities entrance exam (BS degree)	2014 2012 2010-2012 2006 2001
Research Experiences	<i>Graduate Researcher</i> "Algorithms and Computational Biology Lab.", University of California, Riverside. (2011 – present) <ul style="list-style-type: none">- Automated discovery of interesting biological features using multiple genomic time series (ongoing)- Quality based merging of draft genome assemblies (ongoing)- De Novo assembly of ultra-deep sequencing data (ongoing)- Genome wide SNP discovery in Cowpea- Microarray data analysis to discover genes related to wound healing in mouse and human- Computational methods to study synteny between genomes- Assembly and analysis of Malaria parasite genome to study the drug resistant strains "Wireless and Mobile networks lab.", Amirkabir University of Technology (2006-2010) <ul style="list-style-type: none">- Traffic analysis and localization in wireless ad-hoc and sensor networks <i>Summer Intern</i> iDASH (integrating Data for Analysis, Anonymization, and Sharing), University of California, San Diego (summer 2012) <ul style="list-style-type: none">- Designing a Taverna Workflow Engine for Detecting Novel microRNAs	

Publications and Posters	<p>Stefano Lonardi, Seyed H Mirebrahim, Steve Wanamaker, Gianfranco Ciardo, Denisa Duma, Timothy J. Close; "When Less is More: Slicing Sequencing Data Improves Read Decoding Accuracy and De Novo Assembly Quality", under review</p> <p>Sandeep Dhall, Danh C Do, Monika Garcia, Jane Kim, Seyed H. Mirebrahim, Julia Lyuvovitsky, Stefano Lonardi, Eugene A. Nothnagel, Neal Schiller, Manuela Martins-Green; "Generating and Reversing Chronic Wounds in Diabetic Mice by a Single Manipulation of Wound Redox Parameters", under review</p> <p>Mohammad Shokoohi-Yekta, Jesin Zakariaa, Sarah Rotschaferb, Hamid Mirebrahima, Khaleel Razak, Eamonn Keogh; "UCR-USV: Software Tools for Analyzing Mice Vocalizations with Applications to Pre-Clinical Models of Human Disease", NIPS 4B 2013.</p> <p>H. Mirebrahim, M. Dehghan, "Monte Carlo localization of mobile sensor networks using the position information of neighbor nodes", in Proceeding of 8th International Conference on Ad-hoc, Mobile and Wireless networks, ADHOC-NOW 2009, Murcia, Spain, September 2009.</p> <p>[Poster] H.Mirebrahim, T.Close, S.Lonardi; <i>De Novo assembly of ultra-deep sequencing data</i>; ACM Conference on Bioinformatics, Computational Biology, and Health Informatics 2014, Newport Beach, CA.</p> <p>[Poster] H.Mirebrahim, N.Ponts, K.De Roche, S.Lonardi; <i>Reference guided assembly of heterogeneous DNA sequencing data sets to improve the quality of P.falciparum DD2 genome</i>, 2012 SIAM International Conference on Data Mining, LongBeach, CA.</p>										
Paper Reviewer	<p>5th ACM Conference on Bioinformatics, Computational Biology and Health Informatics (ACM-BCB 2014). 14th Workshop on Algorithms in Bioinformatics (WABI 2014) 4th IEEE International Conference on Computational Advances in Bio and Medical Sciences (ICCABS 2014) 22th International Conference on Intelligent Systems for Molecular Biology (ISMB 2014) 25th Symposium on Combinatorial Pattern Matching (CPM 2014) 18th International Conference on Research in Computational Molecular Biology (RECOMB 2014) 11th Asia Pacific Bioinformatics Conference (APBC 2013) 17th International Conference on Research in Computational Molecular Biology (RECOMB 2013) 18th ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD 2012) 12th SIAM International Conference in Data Mining (SDM 2012)</p>										
Teaching Experiences	<table border="0"> <tr> <td>Teaching Assistant of CS14 (Introduction to Programming III), UC Riverside</td> <td>Summer 2013</td> </tr> <tr> <td>Teaching Assistant of CS12 (Introduction to Programming II), UC Riverside</td> <td>Spring 2012</td> </tr> <tr> <td>Teaching Assistant of CS08 (Introduction to Computing), UC Riverside</td> <td>Winter 2012, Summer 2014</td> </tr> <tr> <td>Lecturer of Computer networks Lab., Amirkabir University of Technology</td> <td>Spring 2008, Spring 2009</td> </tr> <tr> <td>Teaching Assistant of Data Structures, Amirkabir University of Technology</td> <td>Fall 2008</td> </tr> </table>	Teaching Assistant of CS14 (Introduction to Programming III), UC Riverside	Summer 2013	Teaching Assistant of CS12 (Introduction to Programming II), UC Riverside	Spring 2012	Teaching Assistant of CS08 (Introduction to Computing), UC Riverside	Winter 2012, Summer 2014	Lecturer of Computer networks Lab., Amirkabir University of Technology	Spring 2008, Spring 2009	Teaching Assistant of Data Structures, Amirkabir University of Technology	Fall 2008
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Languages	English, Farsi, Arabic										

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