

Niema Moshiri

CONTACT INFORMATION	University of California, San Diego Bioinformatics and Systems Biology EBU1 (Jacobs Building) room 6510 EBU3B (CSE Building) room 4252	619-993-1642 niemamoshiri@gmail.com http://niema.net http://github.com/niemasd
EDUCATION	University of California, San Diego Ph.D. Student in Bioinformatics and Systems Biology, 4.000 (expected June 2019) – Advisors: Siavash Mirarab and Pavel Pevzner B.S. in Bioengineering: Bioinformatics, 3.624 (June 2015) – Minor: Economics	
HONORS AND AWARDS	2017 Distinguished Teaching Award, UC San Diego 2017 1st Place Bioinformatics Exchange Flash Talk, UC San Diego 2017 Registration Award, Society for Molecular Biology and Evolution 2015 Distinguished Leadership/Service Award, UCSD BioEng. Dept. 2011–2015 Thurgood Marshall College Honors Program, UC San Diego 2011–2015 Provost Honors, UC San Diego	
PUBLICATIONS	N. Moshiri. <i>A linear-time algorithm to sample the dual-birth model.</i> bioRxiv. doi:10.1101/226423 N. Moshiri & S. Mirarab. <i>A Two-State Model of Tree Evolution and its Applications to Alu Retrotransposition.</i> Systematic Biology. syx088. doi:10.1093/sysbio/syx088 N. Moshiri & L. Izhikevich, <i>Data Structures</i> , 2016. https://stepik.org/course/Data-Structures-579	
TALKS AND CONFERENCES	Jul 2017 International Society for Computational Biology (ISMB) Using Online Classes to Flip Bioinformatics Classrooms Jul 2017 Society of Molecular Biology and Evolution (SMBE) A two-state model of tree evolution and its applications to <i>Alu</i> retrotransposition Jun 2017 TEDxUCSD The Era of Online Learning – https://youtu.be/5JKgUoY9pTg May 2017 Bioinformatics Industry + Academia Symposium Undergraduate Bioinformatics Club (UBIC) at UC San Diego	

RESEARCH EXPERIENCE	2016–2019	Phylogenetics and phylogenomics algorithms Advisors: Dr. Siavash Mirarab and Dr. Pavel Pevzner University of California, San Diego
	2015–2016	Variant analysis in neurological disease Advisor: Dr. Joe Gleeson University of California, San Diego School of Medicine
	2015–2016	Viral integration and structural variation in cancer Advisor: Dr. Vineet Bafna University of California, San Diego
	2014–2016	Computational genomics in disease Advisor: Dr. Terry Gaasterland Scripps Institute of Oceanography — UC San Diego
	2013–2013	Protein structure prediction via Direct Coupling Analysis Advisors: Dr. Andreas Prlić and Dr. Phil Bourne Skaggs School of Pharmacy — UC San Diego
	2012–2012	Protein structure annotation in PyMOL Advisor: Dr. Sara Nichols and Dr. Andrew McCammon University of California, San Diego
	TEACHING EXPERIENCE	2017 –
2016 –		Instructor, Bioinformatics Algorithms (Coursera)
Summer 2017		Associate Instructor, Advanced Data Structures (CSE 100)
Spring 2017		Teaching Assistant, Advanced Bioinformatics Lab (BIMM 185)
Fall 2016		Lecturer (Creator), Biology Meets Computing (CSE 180)
Summer 2016		Instructor, Introduction to Bioinformatics (ThoughtSTEM)
Spring 2016		Teaching Assistant, Current Issues in Bioinformatics (CSE 191)
Spring 2016		Teaching Assistant, Biological Databases (CSE 182)
Spring 2016		Teaching Assistant, Advanced Data Structures (CSE 100)
Winter 2016		Teaching Assistant, Intro. to Bioinformatics Algorithms (CSE 282)
Winter 2016		Teaching Assistant, Molecular Sequence Analysis (CSE 181)
Winter 2016		Teaching Assistant, Advanced Data Structures (CSE 100)
Spring 2015		Teaching Assistant, Genetics (BICD 100)
Fall 2014		Teaching Assistant, Genetics (BICD 100)
Fall 2014		Tutor, Design and Analysis of Algorithms (CSE 101)
Summer 2014		Teaching Assistant, Principles of Microeconomics (ECON 1)
Spring 2014		Teaching Assistant, International Trade (ECON 101)
Spring 2014		Tutor, Introduction to Computer Science: Java (II) (CSE 8B)
Spring 2014		Teaching Assistant, Genetics (BICD 100)
Winter 2014		Teaching Assistant, Genetics (BICD 100)
Winter 2014	Tutor, Introduction to Computer Science: Java (I) (CSE 8A)	
Fall 2013	Tutor, Introduction to Computer Science: Java (I) (CSE 8A)	
Fall 2013	Tutor, Basic Data Structures and OO Design in C++ (CSE 12)	
Summer 2013	Tutor, Basic Data Structures and OO Design in Java (CSE 12)	
EMPLOYMENT HISTORY	2011–2015	IT Assistant IV University of California, San Diego Extension
RELEVANT SKILLS	Coding:	Python, C, C++, Java, Bash, R, Matlab, LaTeX
	Bioinf.:	Genome Assembly, Sequence Alignment, Differential Expression, Variant Calling, Phylogenetic Inference
	Languages:	English, Farsi, Spanish (Conversational)

OUTREACH	2017–	SciChats@Salk Volunteer Salk Institute for Biological Studies
	2017–	SalkEducation Volunteer Salk Institute for Biological Studies
	2017–	Group Mentor Women in Computing (WIC) at UCSD
	2016–	Computer Science Mentor TA UCSD Computer Science and Engineering Department
ORGANIZATION AFFILIATIONS	2015–2019	Graduate Bioinformatics Council (GBIC) at UCSD 2017–2018 VP Onboarding 2016–2017 VP Finance 2015–2016 VP Internal
	2017–2019	Graduate Women in Computing (GradWIC) at UCSD 2017–2018 Outreach Committee Member
	2012–2015	Undergraduate Bioinformatics Club (UBIC) at UCSD 2014–2015 President 2013–2014 Administrative Officer
	2014–2015	Engineering World Health (EWH) at UCSD
	2013–2015	Society of Women Engineers (SWE) at UCSD
	2013–2015	Women in Computing (WIC) at UCSD