Metin Balaban

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EDUCATION

2017 – present	**Ph.D.** Bioinformatics and Systems Biology	UC SAN DIEGO (UCSD), SAN DIEGO, CA, US
	Advisor: Siavash Mirarab. Expected graduation date: May. 2022.	
2015 – 2017	**M.Sc.** Computer Science	EPFL, SWITZERLAND
	GPA: 5.54/6.00. Advisor: Patrick Thiran	
2010 – 2015	**B.S** Computer Engineering (Valedictorian)	MIDDLE EAST TECHNICAL UNIVERSITY, ANKARA, TURKEY
	GPA: 3.97/4.00	

SCHOLARSHIPS AND AWARDS

2020	UCSD Center for Microbiome Innovation Grand Challenge Award ($67K grant)
2015-2016	EPFL Graduate Research Scholarship
2010-2015	Turkey State Outstanding Academic Success Scholarship

EXPERIENCE

Dec 2016 – Jun 2017	**Research Intern** Swisscom Digital Lab	LAUSANNE, VD, SWITZERLAND
	Thesis: Real-time Traffic Estimation on Highways Using Cellular Data	
Sep 2015 – Dec 2016	**Research Scholar** Laboratory of Computational Biology and Bioinformatics.	EPFL, SWITZERLAND
	Mentor: Bernard Moret	

ORAL PRESENTATIONS

2020	**ISMB** Phylogenetic double placement of mixed samples	MONTREAL (VIRTUAL), CANADA
2019	**RECOMB** APPLES: Fast Distance-Based Phylogenetic Placement.	DISTRICT OF COLUMBIA, US
	Won NSF travel fellowship award.	
2018	**GLBIO** TreeCluster: Clustering biological sequences using phylogenetic trees.	MADISON, WI, US
	Won ISCB travel fellowship award.	

PUBLICATIONS

CONFERENCE & JOURNAL PUBLICATIONS AND PREPRINTS

Metin Balaban, Nishat Anjum Bristy, Ahnaf Faisal, Md Shamsuzzoha Bayzid, and Siavash Mirarab (2021). "Genome-wide alignment-free phylogenetic distance estimation under a no strand-bias model". In: *bioRxiv*. DOI: 10.1101/2021.11.10.468111.

Metin Balaban, Yueyu Jiang, Daniel Roush, Qiyun Zhu, and Siavash Mirarab (2021). "Fast and Accurate Distance-based Phylogenetic Placement using Divide and Conquer". In: *Molecular Ecology Resources* March, pp. 1–15. ISSN: 1755-098X. DOI: 10.1111/1755-0998.13527.

Yueyu Jiang, Metin Balaban, Qiyun Zhu, and Siavash Mirarab (2021). "DEPP: Deep Learning Enables Extending Species Trees using Single Genes". In: *bioRxiv*. DOI: 10.1101/2021.01.22.427808.

Shahab Sarmashghi, Metin Balaban, Eleonora Rachtman, Behrouz Touri, Siavash Mirarab, and Vineet Bafna (2021). "Estimating repeat spectra and genome length from low-coverage genome skims with RESPECT". In: *PLoS Computational Biology (in press)*. DOI: 10.1101/2021.01.28.428636.

Metin <u>Balaban</u> and Siavash Mirarab (July 2020). "Phylogenetic double placement of mixed samples". In: *Bioinformatics* 36.Supplement_1, pp. i335–i343. ISSN: 1367-4803. DOI: 10.1093/bioinformatics/btaa489.

Eleonora Rachtman, <u>Metin</u> <u>Balaban</u>, Vineet Bafna, and Siavash Mirarab (2020). "The impact of contaminants on the accuracy of genome skimming and the effectiveness of exclusion read filters". In: *Molecular Ecology Resources* 20.3, pp. 649–661. DOI: https://doi.org/10.1111/1755-0998.13135.

Metin <u>Balaban</u>, Niema Moshiri, Uyen Mai, Xingfan Jia, and Siavash Mirarab (Aug. 2019). "TreeCluster: Clustering biological sequences using phylogenetic trees". In: *PLOS ONE* 14.8, pp. 1–20. DOI: 10.1371/journal.pone.0221068.

Metin <u>Balaban</u>, Shahab Sarmashghi, and Siavash Mirarab (Sept. 2019). "APPLES: Scalable Distance-Based Phylogenetic Placement with or without Alignments". In: *Systematic Biology* 69.3, pp. 566–578. ISSN: 1063-5157. DOI: 10.1093/sysbio/syz063.

Daniel Doerr, <u>Metin</u> <u>Balaban</u>, Pedro Feijão, and Cedric Chauve (2017). "The gene family-free median of three". In: *Algorithms for Molecular Biology* 12.1, p. 14.

TEACHING

| 2020-2021 | **Teaching Assistant** Intro to Computer Engineering | UC SAN DIEGO |
| 2012-2013 | **Teaching Assistant** C Programming | MIDDLE EAST TECHNICAL UNIVERSITY |

SERVICE TO THE SCIENTIFIC COMMUNITY

| 2020 – present | **Peer reviewer for life-sciences journals** |
| | Briefings in Bioinformatics |