Dr. Noushin Ghaffari

Education

- Ph.D., Computer Engineering, Texas A&M University, 2012
- MS, Computer Information Systems, University of Houston – Clear Lake, 2006
- BS, Software Engineering, AZAD Tehran University, 2002

Academic experience

- Prairie View A&M University; Assistant Professor; January 2020-present; Full time
- AgriLife Genomics and Bioinformatics, Texas A&M AgriLife Research, The Texas A&M University System; Bioinformatics Scientist; 2012 – 2019; Full time

Non-academic experience

- Exagen Diagnostics Inc, Houston, TX; Scientific Software Engineer; 2006 – 2008

Certifications or professional registrations

- Software Carpentry Certified Instructor
- Data Carpentry Certified Instructor

Current membership in professional organizations

- None

Honors and awards

- Principal Investigator (PI), NSF - XSEDE Research Allocation on Bridges at the Pittsburgh Supercomputing Center (PSC), "Enhancing Cattle Tick Genomic Resources toward Treating Vector-borne Disease", September 2018 – Present

Service activities (within and outside of the institution)

- Certified instructor with Software Carpentry
- Certified instructor with Data Carpentry
- Editorial Board Member, PeerJ international journal

Most important publication and presentations from the past five years

- Guerrero, K. G. Bendele, N. Ghaffari, J. Guhlin, K. R. Gedye, K. E. Lawrence, P. K. Dearden, T. W. R. Harrop, A. C. G. Heath, Y. Lun, R. P. Metz, P. Teel, A. Perez de Leon, P. J. Biggs, W. E. Pomroy, C. D. Johnson, P. D. Blood, S. E. Bellgard, D. M.

Tompkins, "The Pacific Biosciences de novo assembled genome dataset from a parthenogenetic New Zealand wild population of the longhorned tick, Haemaphysalis longicornis Neumann, 1901." Data in Brief, 2019.

- The Genome in a Bottle Consortium, "A robust benchmark for germline structural variant detection", Accepted for publication at Nature Biotechnology, available at: https://www.biorxiv.org/content/10.1101/664623v3
- N. H. Ing, K. Konganti, **N. Ghaffari**, C. D. Johnson, D. W. Forrest, C. C. Love and D. D. Varner, "Identification and quantification of coding and long non-coding RNAs from stallion spermatozoa separated by density", Accepted for publication in Andrology journal, available at: https://onlinelibrary.wiley.com/doi/abs/10.1111/andr.12791
- J. R. Beytebiere, A. J. Trott, B. Greenwell, C. A. Osborne, H. Vitet, J. Spence, S-H Yoo, Z. Chen, J. S. Takahashi, **N. Ghaffari** and J. S. Menet, "Tissue-specific BMAL1 cistromes reveal that enhancer-enhancer interactions regulate rhythmic transcription", Genes & Development, 1;33(5-6):294-309, 2019.
- K. Chakravorty, M. Pennings, H. Liu, Z. Wei, D. M. Rodriguez, L. T. Jordan, D. McMullen, **N. Ghaffari**, S. D. Le, "Effectively Extending Computational Training Using Informal Means at Larger Institutions", The Journal of Computational Science Education, Volume 10, Issue 1, pp. 40 – 47, 2019
- **N. Ghaffari**, J. Abante, R. Singh, P. D. Blood, L. Pipes, C. Mason and C. D. Jonhson, "What are the most influencing factors in reconstructing a reliable transcriptome assembly?", Available at bioRxiv: https://www.biorxiv.org/content/early/2017/11/16/220269
- J. Abante, **N. Ghaffari**, C. D. Johnson, and A. Datta, "Employing hidden Markov models to assess the genetic content of genome assemblies", GMC Bioinformatics, 2017.
- C-C. Chen, **N. Ghaffari**, X. Qian, and B-J. Yoon," Optimal hybrid sequencing and assembly: Feasibility conditions for accurate genome reconstruction and cost minimization strategy", Journal Computational Biology and Chemistry, 2017.

Most recent professional development activities

- Presented in Data Blitz Symposium at PVAMU, "Utilizing Engineering Tools and Concepts to Make Discoveries in the Fields of Genomics", February 2020
- Attended SC2019, Denver, Colorado, November 2019
- Attended the ASHG Annual Meeting, October 2019
- Organizer and Lead Instructor of the Third Software Carpentry Workshop at TAMU, August 15-16 2019, https://tamu-carpentry.github.io/2019-08-15-TAMU/
- Organizer and Lead Instructor of the second Software Carpentry Workshop at TAMU, February 7-8 2019, https://swang8.github.io/2019-01-24-tamu/