Name : Dr. Othman Soufan
Department : Computer and Cyber Science
Job Title : Assistant Professor
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"Dr. Othman Soufan is an accomplished researcher and Assistant Professor in the Department of Computer Science at the University of Prince Mugrin. His research sits at the crossroads of artificial intelligence, bioinformatics, and cheminformatics, where he focuses on developing innovative tools for biomarker analysis, chemical structure discovery, and integration with applications in drug discovery, food-drug interactions, and toxicology. A proud alumnus of King Abdullah University of Science and Technology (KAUST), Dr. Soufan's work has led to over 22 publications in prestigious journals like Nucleic Acids Research and Nature Communications, amassing more than 6400 citations (H-index: 16). He also serves as an academic editor for PeerJ Computer Science, contributing significantly to the scientific community.
"

Qualification :

*"Postdoctoral Researcher March 2017 - Aug 2020
Advisors: Prof. Jianguo (Je) Xia, Prof. Niladri Basu
Institute of Parasitology, McGill University
Montreal, QC, Canada.

PhD in Computer Science Oct 2012 - Nov 2016
King Abdullah University of Science and Technology (KAUST)
Advisor: Prof. Vladimir Bajic
Thesis: Novel Data Mining Methods for Virtual Screening of Biological Active Chemical Compounds

MSc in Computer Science Sep 2010 - Sep 2012
King Abdullah University of Science and Technology (KAUST)
Advisor: Prof. Vladimir Bajic
Thesis: An Empirical Study of Wrappers for Feature Subset Selection based on a Parallel Genetic
Algorithm: The Multi-Wrapper Model

BSc in Management Information Systems (rst class honours) Jan 2004 - Aug 2010
King Fahd University of Petroleum and Minerals (KFUPM)”

Research Interest :

*”Bioinformatics
Cheminformatics
Artificial Intelligence
Toxicogenomics
Drug Discovery”

Publications :

*”1. Mahbuba Rahman, Rizwan Qureshi, Estevan Bruginski, Meshari Alazmi, Othman Soufan, Kabir H Biswas, and Tanvir Alam. Metabolomics of diabetes and cardiovascular disease. In Metabolomics,pages 239{260. Elsevier, 2023

2. Frederick St. Peter, Srinivas Mukund Vadrev, and Othman Soufan. R400: a novel gene signature for dose prediction in radiation exposure studies in humans. Frontiers in Systems Biology, p.40.

3. Md Rahman, Srinivas Mukund Vadrev, Arturo Magana-Mora, Jacob Levman, and Othman So-ufan. A novel graph mining approach to predict and evaluate food-drug interactions. Scienti c Reports (IF: 4.379), 12(1):1{16, 2022

4. Othman Soufan, Jessica Ewald, Guangyan Zhou, Orcun Hacariz, Emily Boulanger, Alper James Alcaraz, Gordon Hickey, Steve Maguire, Guillaume Pain, Natacha Hogan, et al. Ecotoxxplorer: Leveraging design thinking to develop a standardized web-based transcriptomics analytics platform for diverse users. Environmental toxicology and chemistry (IF: 3.179), 41(1):21{29, 2022

5. Carly Colville, Alper James Alcaraz, Derek Green, Bradley Park, Jianguo Xia, Othman Soufan,Pavel Hruka, David Pot e sil, Zbyn ek Zdr ahal, Doug Crump, et al. Characterizing toxicity pathways of fluoxetine to predict adverse outcomes in adult fathead minnows (pimephales promelas). Science of The Total Environment (IF: 7.963), page 152747, 2022

6. Alper James G Alcaraz, David Potesil, Kamil Mikulasek, Derek Green, Bradley Park, Connor Burbridge, Kerstin Bluhm, Othman Soufan, Taylor Lane, Marek Pipal, et al. Development of a comprehensive toxicity pathway model for 17 -ethinylestradiol in early life stage fathead minnows(pimephales promelas). Environmental Science & Technology (IF: 7.864), 55(8):5024{5036,2021

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8. Le Chang, Guangyan Zhou, Othman Soufan, and Jianguo Xia. mirnet 2.0: network-based

visual analytics for mirna functional analysis and systems biology. Nucleic acids research (IF: 16.97), 48(W1):W244{W251, 2020
9. Jessica D Ewald, Othman Soufan, Doug Crump, Markus Hecker, Jianguo Xia, and Niladri Basu.Ecotoxmodules: custom gene sets to organize and analyze toxicogenomics data from ecological species. Environmental science & technology (IF: 7.864), 54(7):4376{4387, 2020
10. Othman Soufan, Jessica Ewald, Charles Viau, Doug Crump, Markus Hecker, Niladri Basu, and Jianguo Xia. T1000: A reduced toxicogenomics gene set for improved decision making. PeerJ Preprints, 7:e27839v1, 2019
11. Meshari Alazmi, Hiroyuki Kuwahara, Othman Soufan, Lizhong Ding, and Xin Gao. Systematic selection of chemical ngerprint features improves the gibbs energy prediction of biochemical reactions. Bioinformatics (IF: 6.937), 35(15):2634{2643, 2019
12. Guangyan Zhou, Othman Soufan, Jessica Ewald, Robert EW Hancock, Niladri Basu, and JianguoXia. Networkanalyst 3.0: a visual analytics platform for comprehensive gene expression pro ling and meta-analysis. Nucleic acids research (IF:16.97), 47(W1): W234{ W241, 2019
13. M.P. Menden, D. Wang, M.J. Mason, B. Szalai, K.C. Bulusu, Y. Guan, T. Yu, J. Kang, M. Jeon,R. Wol nger, et al. Community assessment to advance computational prediction of cancer drug combinations in a pharmacogenomic screen. Nature communications (IF: 14.92), 10(1):2674,2019
14. Honghao Zhao, Othman Soufan, Jianguo Xia, Rong Tang, Li Li, and Dapeng Li. Transcriptome and physiological analysis reveal alterations in muscle metabolisms and immune responses of grass carp (ctenopharyngodon idellus) cultured at di erent stocking densities. Aquaculture (4.09),503:186{197, 2019
15. Jasmine Chong, Othman Soufan, Carin Li, Iurie Caraus, Shuzhao Li, Guillaume Bourque, David S Wishart, and Jianguo Xia. Metaboanalyst 4.0: towards more transparent and integrative metabolomics analysis. Nucleic acids research (IF: 16.97), 46(W1):W486{W494, 2018
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Other Accreditation:

Member, Institute of Electrical and Electronics Engineers (IEEE)
Member, Association for Computing Machinery (ACM)
Member, International Society for Computational Biology (ISCB)
Member, American Statistical Association (ASA) “