PARHAM KAZEMI

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github.com/parham-k

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Keywords – Bioinformatics, Signal Processing, Natural Language Processing, Deep Learning **Skills** – C++, Python, Java, PyTorch, Keras

EDUCATION

PhD Candidate in Bioinformatics - University of British Columbia	2021 - Present
MSc in Computer Engineering (AI) - University of Isfahan	2019 - 2021
 Thesis: Deep Reinforcement Learning for Training Intelligent Agents in Natural Langua Environments GPA: 18.42/20 	ge
BSc in Computer Engineering (Software) - University of Isfahan	2015 - 2019
 Thesis: Predicting Persian Twitter Users' MBTI Personality Using Text Mining Methods GPA: 18.25/20 (highest in cohort) Attended ICPC West Asia Regionals 2016 and 2017 Competed in Robocup IranOpen 2D Soccer Simulation League 2017 Finalist at the National Computer Engineering Olympiad 2019 	;
EXPERIENCE	
Graduate Research Assistant - BC Cancer's Genome Sciences Centre	2021 - Present
 Member of the Bioinformatics Technology Lab (birollab.ca) 1 first-author publication, collaborated on 4 papers (to date) 	
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VOLUNTARY AND EXTRACURRICULAR WORK

Volunteer Organizer - Vancouver Bioinformatics User Group (vanbug.org)	2023 - Pre	esent
• Responsible for promoting monthly bioinformatics seminars by local and international	speakers	
ACM Students Chapter Member - University of Isfahan	2017 - 2	2019
 Coached 2 university teams at ICPC West Asia Regionals 2020 		
 Instructed Python and Django courses 		

• Assisted in technical setup for high school and undergraduate programming contests and AI challenges

PUBLICATIONS

Warren, R. L., Coombe, L., Wong, J., **Kazemi, P.**, & Birol, I. (2024). Human ancestry inference at scale, from genomic data. bioRxiv, 2024-03.

Coombe, L., **Kazemi, P.**, Wong, J., Birol, I., & Warren, R. L. (2024). Multi-genome synteny detection using minimizer graph mappings. bioRxiv, 2024-02.

Wong, J., **Kazemi, P.**, Coombe, L., Warren, R. L., & Birol, I. (11 2023). aaHash: recursive amino acid sequence hashing. Bioinformatics Advances, vbad162. doi:10.1093/bioadv/vbad162

Nikolić, V., **Kazemi, P.**, Coombe, L., Wong, J., Afshinfard, A., Chu, J., Warren, R. L., & Birol, I. (2022). btllib: A C++ library with Python interface for efficient genomic sequence processing. Journal of Open Source Software, 7(79), 4720. doi.org/10.21105/joss.04720

Kazemi, P., Wong, J., Nikolić, V., Mohamadi, H., Warren, R. L., & Birol, I. (2022). ntHash2: recursive spaced seed hashing for nucleotide sequences. Bioinformatics, 38(20), 4812–4813. doi.org/10.1093/ bioinformatics/btac564

Kazemi, P., & Karshenas, H. (2021). Fuzzy Word Sense Induction and Disambiguation. IEEE Transactions on Fuzzy Systems, 30(9), 3918–3927. doi.org/10.1109/tfuzz.2021.3133905

PRESENTATIONS

Kazemi, P., Coombe, L., Warren, R. L., & Birol, I. (2024). AlEdit: Genome Assembly Polishing using Machine Learning and Spaced Seeds. Poster in BIG Research Day 24 (Vancouver, Canada)

Kazemi, P., Mohamadi, H., Chu, J., Coombe, L., Warren, R. L., & Birol, I. (2023). ntHits: streaming through raw sequencing data to profile and filter k-mers with selected multiplicities. Poster in the 13th RECOMB Satellite Conference on Biological Sequence Analysis (Istanbul, Turkey)

Kazemi, P. (2020). Natural language processing: what, how, and why. Presentation at the University of Isfahan's Annual Research Week (Esfahan, Iran)