



Dr. Simin Mirzaei, Ph.D., M.Sc., B.Sc.

Research Associate and Lecturer

Digital Multimedia Lab, Department of Electrical and Computer Engineering

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Biography:

Dr. Simin Mirzaei is a Research Associate in the Digital Multimedia Laboratory (DML) at the Department of Electrical and Computer Engineering, University of British Columbia (UBC), Vancouver, Canada. She completed her Ph.D. in Electrical and Computer Engineering at UBC in just two years (2023-2025). During her PhD time at UBC, she has also served as a Graduate Academic Assistant and Teaching Assistant for multiple undergraduate courses, contributing to curriculum development, mentorship, and student training.

Dr. Mirzaei's research lies at the intersection of artificial intelligence, signal processing, and medical imaging, with particular interests in image denoising, super-resolution, compression, HDR imaging, and quality assessment. Her doctoral research focused on leveraging artificial intelligence and image processing techniques to enhance the visual quality of low-dose Cone-Beam Computed Tomography (CBCT) scans, contributing to improved diagnostic accuracy and patient safety in dental imaging. Her work has been published in prestigious journals and conferences and has earned Best Paper Awards at several international venues, including ICFSP 2024 (Paris), Global Health 2024 (Venice), and eTELEMED 2025 (Nice).

Beyond her research, Dr. Mirzaei is also an active member of the Standards Council of Canada (SCC), where she contributes to ISO/IEC JTC 1/SC 29, the international committee responsible for the coding of audio, picture, multimedia, and hypermedia information. In this role, she helps advance global multimedia standards and promotes the integration of emerging technologies in imaging and signal processing. She also assisted in the preparation of an NSERC Alliance Grant proposal within UBC's Department of Electrical and Computer Engineering, supporting the development of collaborative research between academia and industry. In addition, she served as a panelist at the 17th International Conference on eHealth, Telemedicine, and Social Medicine (Global Health – eTELEMED 2025), sharing insights on the future of AI-driven healthcare technologies and medical imaging.

Google Scholar: <https://scholar.google.ca/citations?user=FeoDaW8AAAAJ&hl=en>