Dr. Esmaeil Ghorbani is a postdoctoral fellow in Mechanical Engineering Department at Polytechnique Montréal, where he works with Professor Frederick Gosselin. His research focuses on developing data-driven and interpretable digital twins for large-scale structures, with applications in civil infrastructure and renewable energy. He collaborates with industry partners such as Hydro Québec and MAYAHTT, and is passionate about translating research findings into real-world solutions. This is demonstrated by his consistent work with both lab-scale and full-scale experimental data. In addition to his research, Dr. Ghorbani is a part-time lecturer in Mechanical Engineering Department at Concordia University. He also has valuable industry experience, having spent four years as a registered Professional Engineer at KGS Group. In this role, he worked on several projects across Canada for dam safety review, sluiceway refurbishment, and life extension of power stations. Dr. Ghorbani earned his PhD in structural engineering from the University of Manitoba in 2021, where his research focused on data-driven methods for damage quantification in civil infrastructure. During his doctoral studies, he was awarded the prestigious University of Manitoba Graduate Fellowship for three consecutive years. Prior to his PhD, he gained experience in the analysis of rotating machinery as an FEA engineer in Iran's Oil and Gas Industry. Dr. Ghorbani also holds master's and bachelor's degrees in mechanical engineering.