

IEEE SMC Member Prof. Tiago Falk Receives Prestigious Award from the Canadian Natural Sciences and Engineering Research Council

On November 6th, 2024 the Natural Sciences and Engineering Research Council of Canada (NSERC) announced that IEEE SMCS Member Tiago H. Falk was the recipient of the prestigious NSERC Synergy Award for Innovation. As detailed on NSERC's website (https://www.nserc-crsng.gc.ca/Prizes-Prix/Synergy-Synergie/About-Apropos_eng.asp), the Synergy Award for Innovation honors the most outstanding achievements in Canadian university-industry partnerships, with outcomes enriching the academic and research programs within Canadian post-secondary institutions while providing concrete benefits to Canadians.

Prof. Falk worked closely with colleague Sébastien Tremblay (Laval University, Cognitive Psychology) and Thales Digital Solutions Inc. to build cognitive computing methods and cognitive AI models of anxiety, stress, mental workload, and fatigue that are accurate, reliable, and explainable in real-world settings. Over the last decade, the cognitive AI models developed have been deployed across Canada, Europe, Japan, and the USA and are being used by front-line professionals, such as nurses, police officers, and public safety officers to directly improve their mental health. Models are also being used by the Canadian Space Agency to investigate the use of a crew monitoring system for astronauts undergoing simulated deep-space exploration missions. Models were also used during the COVID-19 pandemic and allowed Canadian doctors to remotely monitor the anxiety level of individuals quarantining alone at home. Over the last decade, Prof. Falk and Prof. Tremblay have trained 30+ highly qualified personnel in cognitive computing principles and cognitive AI model development via innovations in signal processing, machine learning, cognitive psychology, human factors, and human-machine systems.



More details about the award can be found in the links below. Congratulations Prof. Tiago Falk!

<https://inrs.ca/en/news/professor-tiago-falk-wins-the-nserc-2024-synergy-award-for-innovation/>

https://www.nserc-crsng.gc.ca/Prizes-Prix/Synergy-Synergie/Profiles-Profils/FalkTremblay-FalkTremblay_eng.asp