2023 7.26 (wed.) 12:10 ~ 12:50

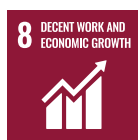| 12:10-12:15 | ◆ Introduction |
| 12:15-12:40 | ◆ Seminar (Presentation) |
| 12:40-12:50 | ◆ Q&A |

Online (Zoom)
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Unleashing Intelligence:
Exploring New Horizons for Natural and Synthetic Minds

Chair: **Assoc. Prof. Kim SCHUMACHER** (Research Futures Coordinator of Q-AOS)

3 GOOD HEALTH AND WELL-BEING　**4 QUALITY EDUCATION**　**8 DECENT WORK AND ECONOMIC GROWTH**　**10 REDUCED INEQUALITIES**　**16 PEACE, JUSTICE AND STRONG INSTITUTIONS**　**17 PARTNERSHIPS FOR THE GOALS**

Key Words

Unleashing Intelligence,　New Horizons,　Natural and Synthetic Minds,　Biological Intelligence,　Artificial Intelligence,　Robustness,　Adaptivity,　Education Improvement,　Reasoning,　Conflict Resolution,　Collaborative Augmented Reasoning

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Danilo Vasconcellos Vargas is currently an Associate Professor at Kyushu University, Visiting Researcher at the University of Tokyo and CEO & Founder of MiraiX (www.miraix.org). His research interests span Artificial Intelligence (AI), evolutionary computation, complex adaptive systems, interdisciplinary studies involving or using an AI's perspective and AI applications. Many of his works were published in prestigious journals such as Evolutionary Computation (MIT Press), IEEE Transactions on Evolutionary Computation and and IEEE Transactions of Neural Networks and Learning Systems with press coverage in news magazines such as BBC news. He received awards such as the IEEE Transactions on Evolutionary Computation Outstanding 2022 Paper award, the IEEE Excellent Student Award and scholarships to study in Brazil, Germany and Japan for many years. Regarding his community activities, he presented tutorials at GECCO2018, WCCI2020 and at the renowned top AI conference IJCAI2020. He was also co-organizer and advisor committee of various workshops both about AI and about multidisciplinary perspectives for AI with more than 10 invited talks, one of which was given in a workshop in CVPR 2019. Currently, he leads the Laboratory of Intelligent Systems aimed at building a new age of robust and adaptive artificial intelligence funded/supported by the two biggest Japan's funding agencies: JST and JSPS (including JST ACT-I, JST ACT-I Acceleration Phase, JSPS Kakenhi Wakate). More info can be found both in his Labpage (http://lis.inf.kyushu-u.ac.jp) and his Company website (www.miraix.org).

Intelligence, whether biological or artificial, serves as a foundational pillar of society, distinguishing us as human beings. Despite its significance, comprehending and reasoning about intelligence can often challenge common sense. In this presentation, we embark on a journey to unravel the complexities of intelligence. The first part delves into the surprising lack of robustness and adaptivity in even the most accurate AI models, prompting the need for a novel paradigm. We outline a robust and adaptive AI approach as a solution to this issue. In the second part, we shift our focus to enhancing education and fostering reasoning abilities. By addressing conflicts and fostering collaborative augmented reasoning, we pave the way for improved education. Lastly, we explore the alignment between our efforts and the Sustainable Development Goals (SDGs) and provide a glimpse into future undertakings.