Painting the Bigger Picture: AI is Orchestration

AI is the study of intelligent agents. Based on this definition, the first part of our talk will provide a short introduction with a brief history of AI showing the intertwined development between AI and robotics.

Considering that intelligent systems can also be considered agents, we recognize that cyber-physical systems subsume robotics and therefore also go hand in hand with AI. This viewpoint is valuable since it emphasises several aspects that otherwise often remain neglected in the discussion of AI. Specifically, in this talk we will explain that a cyber-physical system is a system-of-systems and that a fundamental challenge is the orchestration of all the involved subsystems.

We will then highlight several of the long-standing questions and obstacles that are required for such an orchestration. While no generally agreed upon solution has emerged to tackle those challenges, it is clear that in order to make progress a more holistic and interdisciplinary view is required.

The ASUS Robotics and AI Center is therefore building up a world-class, interdisciplinary team with bright minds that can push the boundary of the current state-of-the-art. This will unlock new opportunities and application areas in a digitally connected world where the real and virtual world move closer and closer together.

Speaker Bio

Dr. Roland Angst is currently the Head of the ASUS Robotics and AI Center and is leading efforts to develop ambitious technologies in the field of robotics and AI.

Roland joined ASUS in 2015 as a Senior Director in the New Product Division where he served as a lead software architect for Zenbo, an Android-based home robot, and as lead advisor for cross-functional robotics, computer vision, and machine learning teams.

Prior to joining ASUS, Roland was a Junior Group Leader affiliated with the Center for Visual Computing and Communication at the Max Planck Institute for Informatics in Germany. From 2013 to 2015 he was a visiting assistant professor at Stanford University with the Image, Video, and Multimedia Systems group and with the Geometric Computation group. His research at Stanford explored ways of combining scene understanding and 3D reconstruction in a joint framework.

Roland received his doctoral degree in 2012 from the Swiss Federal Institute of Technology (ETH) in Zürich, following research that focused primarily on geometric computer vision and subspace models and algorithms. In 2007 he earned an ETH Medal for his thesis and he received his master's degree with distinction in computer science from ETH.

About ASUS Robotics & AI Center

The ASUS Robotics and AI Center is a world-class research and development laboratory that was established with the mission of developing ambitious technologies that will define the future. Our multidisciplinary team of the brightest engineers and scientists are dedicated to creating software-focused solutions that will solve some of the most enduring challenges in the fields of robotics and artificial intelligence.

活動時間與地點 (Time and Location)

【NTU 台灣大學】2021/03/26 (五) 10:00-12:00 台大博理館 201 教室