

The 178th TAOYAKA Program Seminar The 5th Seminar on Collective Impact in Transportation Systems

Deep Reinforcement Learning with Applications to Transportation Systems

Invited talk by **Dr. Thommen George Karimpanal**
(Applied Artificial Intelligence Institute, Deakin University)

Abstract: Deep reinforcement learning has recently witnessed unprecedented success in a variety of domains such as in video game playing and robotics and is emerging as a useful tool in a number of other applications, including transportation systems. The first part of this talk will aim to provide a gentle introduction to reinforcement learning and other related fundamental concepts, important reinforcement learning algorithms such as Q-learning, dyna, DQN, etc., along with the limitations and open problems in the field. The second part of the talk will focus on some of the breakthrough applications of reinforcement learning, with discussions on how existing reinforcement learning approaches have been utilised in transportation systems and how they can potentially be utilised in the future.

Machine learning for Travel Mode Prediction: Pitfalls and Opportunities

Talk by **Dr. Varun Varghese**
(Hiroshima University)

Registration:
<https://onl.tw/DWnkUDT>

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Time: 9:00 - 11:00 (JST)
Place: Online (Zoom)
Language: English

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