Session 3: Technology and Society

Date: January 23, 2019

Venue: Knowledge Theater in Grand Front Osaka

“Regulating the AI Industry through Prosecution”

Tatsuhiko Inatani (Kyoto University)

Recent development of AI technology may enable a practical use of autonomous system, including an autonomous driving car in the near future. But the criminal responsibility for an accident caused by the system remains still opaque, due to the blaming nature of criminal law theory based on the free will concept. Then I argue to adopt the alternative system that allows healthy development of the system and the cohabitation between human and machine in this talk.

“EU Data Protection Law in the Age of Digitalisation”

Ziga Skorjanc (University of Vienna)

Starting from the legal roots of data protection in Europe, we will discuss the recent developments in the European data protection law, primarily the GDPR, and their adequacy for the digital age. Additionally its interplay with Japanese data protection regime will be highlighted.

“The Driverless Human Factor: User Needs and Experience in the Design and Testing of High to Fully Autonomous Vehicle Technology”

Phillip Morgan (Cardiff University)

Transport with autonomous capabilities is not new, although highly autonomous or ‘driverless’ cars still are still not at a level of readiness for large-scale deployment anywhere in the world. The level of autonomy of some currently available vehicles is arguably partial at best and there are significant restrictions including technical, logistical, and legal. Also, the symbiosis between the technology and the human user is a crucial factor to consider. I will discuss whether humans and society are anywhere near ready to start handing over control to driverless cars. I will present findings from a range of studies linked to two of my IUK funded projects (Venturer, and, Flourish) with a specific focus on human behaviour, attitudes, and user experience. In one study involving a simulator and road vehicle, we measured safety when retaking control from a partially autonomous vehicle (Level 3: SAE, 2016) operating at different speeds in urban environments. In another study, also using a simulator and road vehicle, we measured trust in a highly autonomous vehicle (Levels 3-4) performing increasingly complex manoeuvres. We are also developing human-machine interfaces for fully autonomous vehicles (Level 5) that might help to improve trust, support situation awareness, and reduce cognitive load amongst individuals with high levels of mobility needs such as older adults. I will critically discuss findings from these studies and encourage more international collaboration in this area to fuel faster and more effective progress.