Title: Towards Safe and Reliable Advanced Air Mobility

Abstract: Advanced Air Mobility (AAM), which is an umbrella term including Urban Air Mobility (UAM), electric Vertical Take-Off and Landing (eVTOL), flying taxis and drones, is emerging as a sustainable and efficient transportation system. This talk will introduce key enabling technologies to enable safe and reliable autonomous operations of AAM, across various levels of control and flight phases. The talk will start with current technological gaps in risk assessment and mitigation approaches on AAM operations, and the corresponding research activities to address these gaps will be introduced. The lessons learnt from the analysis/demonstration will be shared, providing a vision for future research.