

# International Symposium on Artificial Intelligence - Machine Learning in Safety Critical Systems

21 - 22 October 2021

## PROFILE



### **Dr. Huafeng Yu**

Senior Researcher  
Boeing Research & Technology

Dr. Huafeng Yu is a senior researcher with the AI Tech Team of Boeing Research & Technology. He has more than 15 years' experience in AI, machine learning, safety certification, cybersecurity, formal methods, and model-based engineering. He is one of the key contributors for verification and validation (V&V) for AI-enabled Autonomy programs at Boeing. Dr. Yu has 11 granted patents, 2 edited Springer books, and 40 plus peer-reviewed research papers. He serves as the associate or guest editor of 4 journals, and program committee member of 13 conferences. He earned all his B.S., M.S., and Ph.D. in computer science.

Dr. Yu is leading an industry-academia-government team as the Principal Investigator (PI) for NASA-funded "Autonomy V&V Roadmap" project. He is also the PI for FAA-funded "Safety Assurance for AI/ML in Safety Critical Airborne Systems" project; Boeing "V&V for AI-enabled Autonomous Systems" project, and NASA-Boeing collaboration project on "Autonomy V&V". He is Boeing's assurance and certification lead on DARPA's "Assured Autonomy" program.

Dr. Yu is the R&D and Academic Liaison/Ambassador of EUROCAE WG-114/SAE G-34 (AI in Aviation) to harmonize the needs and potential solutions among industry, academia, R&D and government stakeholders, via organizing technical presentations and exchange meetings. He led a working group that developed the formulation and definitions of machine learning V&V as part of AI standardization in aviation. He is also an active contributor for the AI, Cybersecurity, DAA, and UAS System Safety sections of the ANSI UAS Standardization Collaborative (UASSC) Roadmap V2. He is an active member of SAE S-18A/EUROCAE WG-63 SG-1 Autonomy WG, SAE G-32 Cyber-Physical Systems Security, SAE G-31 Electronic Transactions for Aerospace (Blockchain for UAS & AAM), etc.