

**Laboratory Name:** ASELSAN Avionic Cyber Security Frontier R&D Laboratory

**Company:** ASELSAN Elektronik Sanayi ve Ticaret A.Ş.

**Laboratory Manager:** Dr. Şener YILMAZ

**Laboratory Manager Short Biography:** Şener YILMAZ graduated with a degree in Electrical and Electronics Engineering from Bilkent University in 1996 and immediately began his career at ASELSAN as a Software Design Engineer. He continued his education at the Middle East Technical University, obtaining a Master's degree in 1999 and a Ph.D. in 2006 in the same field. His early work at ASELSAN involved developing software for advanced thermal camera systems until 2004, after which he shifted his focus to avionics. He played a pivotal role in several major projects, such as the ATAK Helicopter, T-38 Trainer Aircraft, ANKA Turkish Unmanned Aerial Vehicle, HÜRKUŞ-B Trainer Aircraft, S-70i/T-70 Turkish Utility Helicopter, and Gökbey Helicopter. Since 2014, he is the manager of Avionics Software Design Department at ASELSAN.

**Reserach Area:** Within the laboratory's scope, research will encompass various innovative areas including the detection and prevention of cyber attacks on avionic systems and data bus, development of avionic platform-specific, quantum-resistant secure authentication, key exchange, and signing protocols utilizing post-quantum cryptography, as well as security solutions for avionic wireless networks.