## Special Issue

## Robust Fault-Tolerant Controllers for Unmanned Aircraft Vehicles

## Message from the Guest Editor

There are many methods for designing robust controllers for UAVs. However, there are not many methods for designing fault-tolerant and safe UAV controllers. Some controllers are developed using finitestate machines (FSMs) and implemented in fieldprogrammable gate arrays (FPGAs). At the same time, there are no methods for designing UAV controllers implemented on a system on a chip (SoC). The reliability and fault-tolerance problems of UAV controllers can be addressed at various levels: algorithmic, structural, functional-logical, and at the level of hardware description language (HDL). The speed and functional power of UAV controllers can be increased by implementing them in FPGAs and SoCs rather than microprocessors and microcontrollers. The following tasks are considered promising in the development of UAV controllers: obstacle avoidance, evasion of attacks by other drones, countering cyberattacks, neutralizing or mitigating external disturbances, switching to autonomous control in the event of external disturbances, using machine learning and swarm intelligence, and integration with artificial intelligence.

## **Guest Editor**

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## Deadline for manuscript submissions

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