These proceedings contain the papers presented at the International Symposium on Bio-inspired, Learning, and Intelligent Systems for Security (BLISS-2009), held in Edinburgh, UK, on August 20-22, 2009.

This symposium was addressed to developers and users of reliable, versatile and intelligent systems needed by a broad range of security applications. Intelligent systems are defined here as artificial computational systems which operate in part or fully autonomously, and which display behavior that if it were to be observed in animals would normally become associated with intelligence of one sort or another.

Examples of such applications are: the detection and prevention of cyber-crimes and identity theft, internet security, security of financial systems, security of public transportation systems, emergency response systems (e.g. combining space-based systems with geographical information systems), etc. Systems with different degrees of autonomy of operation benefit greatly from incorporating aspects and mechanisms that are found in a broad range of biological systems: from survivability and adaptation of the simple living structures to learning, creativity, cognition and various forms of intelligence that are normally associated with humans.

The symposium aimed to bring together: (a) investigators of bio-inspired and intelligent techniques (more exactly, techniques that increase the machine intelligence quotient (MIQ), such as, for example, techniques of Artificial Intelligence) and their implementations on high-performance systems with (b) real-world application developers, project managers, system integrators and end users of security applications.

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