SecDef'15 Chairs' Welcome

It is our great pleasure to welcome you to the 2015 Workshop on Genetic and Evolutionary Computation in Defense, Security, and Risk Management (SecDef'15). With the constant appearance of new threats, research in the areas of defense, security and risk management has acquired an increasing importance over the past few years. These new challenges often require innovative solutions and machine learning, specifically computational intelligence techniques can play a significant role in finding them. The workshop encouraged the submission of papers describing both theoretical developments and applications of the aforementioned techniques to the following topics:

- Cyber-crime and cyber-defense: Anomaly detection systems, attack prevention and defense, threat, forecasting systems, anti-spam, antivirus systems, cyber warfare, cyber fraud;
- IT Security: Intrusion detection, behavior monitoring, network traffic analysis;
- Security for wireless, sensor and mobile networks;
- Risk management: identification, prevention, monitoring and handling of risks, risk impact and probability estimation systems, contingency plans, real time risk management;
- Critical Infrastructure Protection (CIP);
- Advanced Persistent Threats (APTs);
- Design of military systems and sub-systems;
- Logistics and scheduling of military operations;
- Strategic planning and tactical decision making;
- Multi-objective techniques for examining tradeoffs in military, security, and counter-terrorism procedures;
- Automated discovery of tactics and procedures for site security, force protection, and consequence management;
- Other related areas.

The workshop invited completed or ongoing work, with the aim to encourage communication between active researchers and practitioners to better understand the current scope of efforts within this domain. The ultimate goal is to understand, discuss, and help set future directions for computational intelligence in security and defense problems.

This year, the organizers accepted six high-quality submissions from North America and Europe. We would like to thank the authors and the reviewers for these excellent papers, and strongly encourage the broader security and defense research community to prepare and submit technical papers to future SecDef workshops. In addition, we thank ACM SIGEvo and GECCO 2015 organizers, especially Gisele Pappa (GECCO 2015 Workshops Chair), and Anna I Esparcia-Alcázar (GECCO 2015 General Chair) for their assistance. Finally, we thank Vahid Aghaei Forushani from Dalhousie University for designing and setting up the workshop web site.

We hope that you will find this program interesting and thought provoking and that the symposium will provide you with a valuable opportunity to share ideas with other researchers and practitioners from institutions around the world.



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