

SCHEDULE **OPTIMA CONFERENCE PROGRAM V 1.1 / THURSDAY, MAY 25, 2017 (MORNING)**

8:00–8:30	Participants arrival "KSIROS" Amphitheatre	
8:30–8:35	Conference Opening by the Commander of the Hellenic Military Academy	
8:35–8:45	Introductory Presentation by Professor Nicholas J. Daras	
8:45–9:10	Conference Opening Lecture ("KSIROS" Amphitheatre) A. TSOUDOS and V.LAPPAS (Cranfield University, U.K.) "Formal modeling and verification of an autonomous swarm of UAVs for monitoring applications"	
	All A Sessions in "Penteas" Amphitheatre	All B Sessions in "Chrisofakis" Amphitheatre
9:20–10:50	Session 1A: DEFENSE AND DIGITAL SECURITY IN THE ECONOMY chair: Kyriaki Athanassouli	Session 1B: STOCHASTIC REASONING AND APPLICATIONS chair: Ioannis S. Triantafyllou
9:20–9:40	K.ATHANASSOULI (Hellenic Military Academy) "Cyber-war and cyber-warriors in the digital economy"	P.FIKA ⁽¹⁾ and C.KOUKOVINOS ⁽³⁾ ⁽¹⁾ National and Kapodistrian University of Athens and ⁽²⁾ National Technical University of Athens (NTUA) "Estimating the precision matrix for big data"
9:40–10:00	I.D.SALAVRAKOS (National and Kapodistrian University of Athens) "Winning and losing at the same time: A re-assessment of the Italian defense production during World Wars I and II"	M. V. KOUTRAS ⁽¹⁾ and Io. TRIANTAFYLLOU ⁽²⁾ ⁽¹⁾ University of Piraeus and ⁽²⁾ University of Thessaly "Compound scan statistics based on phase-type distributions: advances and applications"
10:00–10:20	K.ATHANASSOULI (Hellenic Military Academy) "Economic implications of the rise of information warfare, cyber-war and cyber-security"	D.CHRISTOU ⁽¹⁾ and M.MITROULI ⁽²⁾ ⁽¹⁾ Deree - The American College of Greece and ⁽²⁾ National and Kapodistrian University of Athens "Embeddability - extendability of Hadamard matrices"
10:20–10:40	R.W.TSAGALIDIS (Stockholm University) "Safety and Security for the system-of-systems in the military from a cyber-physical perspective in the new era of Internet-of-Things"	Io. TRIANTAFYLLOU ⁽¹⁾ and N.PANAGIOTOU ⁽²⁾ ^{(1),(2)} University of Thessaly "A simulation study of distribution-free phase II control charts: advances and applications"
10:40–10:50	General Discussion & Comments	
10:50–11:05	Coffee Break	
11:05–11:10	Commemorative Photo	
11:10–12:20	Session 2A: HUMAN FACTOR EVALUATION OF MILITARY SYSTEMS chair: Evangelia Kyrimi	Session 2B: OPERATIONAL ANALYSIS chair: George Geroulis
11:10–11:30	E.KYRIMI ⁽¹⁾ , S.MOSSADEGH ⁽²⁾ , N.TAI ⁽³⁾ and W.MARSH ⁽⁴⁾ ^(1,2) Queen Mary University of London, ⁽³⁾ Royal London Hospital, ⁽⁴⁾ Royal Centre for Defence Medicine "Counterfactual reasoning with Bayesian networks as a healthcare governance tool to enhance defence medical services"	D.GERONTOGIANNIS (Hellenic Army General Staff) "Operational Analysis & Crisis Management (OACM) framework: The paradigm of 2011 military intervention in Libya"
11:30–11:50	N.BENIAS and S.LEVENTOPOULOS (Hellenic Army General Staff) "Cyber-warfare - Beyond the basics"	G.GEROULIS (Hellenic Air Force General Staff) "The effect of the applied Operational Analysis on the way to confront the modern symmetric & asymmetric threats"
11:50–12:10	G.V.LYKOS ⁽¹⁾ , N.P.VENTIKOS ⁽²⁾ , A.K.RAMMOS ⁽³⁾ and V.G.PETROPOULOS ⁽⁴⁾ ^(1,3,4) Naval Training Command, ⁽²⁾ NTUA "Redesigning the flood training Unit of the Hellenic Navy: Principles and aspects of human centred design"	T.SCZUREK ⁽¹⁾ and M.GORNIKIEWICZ ⁽²⁾ ^{(1),(2)} Military University of Technology of Poland "Military info-support operations in modern conflicts: evolution of MISO's methodology during the modern conflicts in XXI century"
12:10–12:20	General Discussion & Comments	
12:20–12:40	Coffee Break	
12:40–14:15	Session 3A: FORECASTING AND PREDICTION chair: Nicholas J. Daras	Session 3B: MODERN DEFENSE TECHNOLOGIES MODELS chair: Konstantinos Grivas
12:40–13:00	G.KOUMPAROULIS ⁽¹⁾ and G.GALANIS ⁽²⁾ ⁽¹⁾ Hellenic Military Academy and ⁽²⁾ Hellenic Naval Academy "An optimization methodology for operational environmental forecasting systems"	K.GRIVAS (Hellenic Military Academy) "The David's sling solution": A projectile - centric defense and deterrence model for the Republic of Cyprus"
13:00–13:20	E.PANAGIOTOPOULOU ⁽¹⁾ and G.GALANIS ⁽²⁾ ⁽¹⁾ Hellenic Military Academy and ⁽²⁾ Hellenic Naval Academy "Forecasting extreme waves and estimating the associated risk for selected sea areas of Greece"	S. LEVENTOPOULOS (Hellenic Army General Staff) "Ground based air defense systems - New challenges and prospective"
13:20–13:40	N.J.DARAS (Hellenic Military Academy) "Systemic theory and deterministic prediction"	D.STEFANATOS (Hellenic Military Academy) "Fast control of a gun turret using the method of shortcuts to adiabaticity"
13:40–14:00	M.MITROULI ⁽¹⁾ and P.ROUPA ⁽²⁾ ^(1,2) National and Kapodistrian University of Athens "Estimating vector forms in applications"	S.DESSALERMOS ⁽¹⁾ and D.PARASCHOS ⁽²⁾ ⁽¹⁾ Hellenic Naval General Staff and ⁽²⁾ Hellenic Military Academy "Modern methods of sound signal processing from hydrophone arrays"
14:00–14:15	General Discussion & Comments	
14:15–15:00	LUNCH BREAK	

SCHEDULE **OPTIMA CONFERENCE PROGRAM V 1.1 / THURSDAY, MAY 25, 2017 (AFTERNOON)**

15:00–15:30	Conference Lecture given in the Honor of the Military Hierarchy (Amphitheatre "PENTEAS") A.MANIKAS and V.SRIDHAR (Imperial College, U.K.) "Small array systems with massive performance capabilities: Beamforming, localisation and tracking"	
	All A Sessions in "Penteas" Amphitheatre	All B Sessions in "Chrisofakis" Amphitheatre
15:40–16:50	Session 4A: SYSTEMS INTERFACES chair: Elias Yfantis	Session 4B: DETECTION chair: Christodoulos E.Athanasiadis
15:40–16:00	N. DOUKAS (Hellenic Military Academy) "Big Data processing for sentiment extraction"	C.E.ATHANASIADIS ⁽¹⁾ , S.DIMITROULA ⁽²⁾ , E.KIKERI ⁽³⁾ and K.SKOUROGIANNIS ⁽⁴⁾ ^{(1),(2),(3),(4)} National and Kapodistrian University of Athens "A mathematical approach of detecting buried chiral objects"
16:00–16:20	S.MICHOTIS ⁽¹⁾ and E.YEANTIS ⁽²⁾ ⁽¹⁾ TETRAS and ⁽²⁾ Hellenic Naval Academy "Mind the cultural gap: An innovative methodology leading to realistic roadmaps for organizational change"	E.ATHANASIADOU ⁽¹⁾ , V.SEVROGLOU ⁽²⁾ and S.ZOI ⁽³⁾ ^(1,2) National and Kapodistrian University of Athens and ⁽³⁾ University of Piraeus "Scattering of elastic waves by a two-layered thermoelastic body"
16:20–16:40	K.DEMERTZIS ⁽¹⁾ and K.ILIADIS ⁽²⁾ ⁽¹⁾ Hellenic Army General Staff and ⁽²⁾ Democritus University of Thrace "Automated prevention of phishing attacks with machine learning Web application firewall and GPOS"	C.E.ATHANASIADIS ⁽¹⁾ and I.LARCOUDIS ⁽²⁾ ^{(1),(2)} National and Kapodistrian University of Athens "Detecting layered ellipsoids using inverse acoustic scattering problems"
16:40–17:00	T.ZIKOS ⁽¹⁾ , N.KARAMPERAS ⁽²⁾ , D.ZAIRES ⁽³⁾ and N.KARADIMAS ⁽⁴⁾ ^(1,2,3) Hellenic Army General Staff and ⁽⁴⁾ Hellenic Military Academy "Ordering Policies for the optimal performance of the Hellenic Military Logistics System: An overview of the literature and future concerns"	D.MOUZAKIS ⁽¹⁾ and D.G.DIMOGLIOPOULOS ⁽²⁾ ⁽¹⁾ Hellenic Military Academy and ⁽²⁾ A.T.E.I. of Piraeus "Acoustic emission detection of accelerated aging inflicted damage in carbon fiber reinforced composites"
17:00–17:10	General Discussion & Comments	
17:10–17:20	Coffee Break	
17:20–19:00	Session 5A: MATHEMATICAL MODELLING AND SIMULATION chair: George Galanis	Session 5B: DECISION MAKING METHODS IN PRODUCTION AND SERVICE SYSTEMS chair: Apostolos Burnetas
17:20–17:40	P.GAROUNIATIS ⁽¹⁾ , M.LOUGKOS ⁽²⁾ , G.GALANIS ⁽³⁾ and E.PAPAGEORGIOU ⁽⁴⁾ ^(1,2,3,4) Hellenic Naval Academy "Mathematical modeling of underwater sound propagation: An application to Greek sea areas"	M.BENIOUDAKIS ⁽¹⁾ , A.BURNETAS ⁽²⁾ and G.IOANNOU ⁽³⁾ ^(1,3) Athens University of Management Science and Technology, ⁽²⁾ National and Kapodistrian University of Athens "Strategic equilibrium and optimal due date quotation in production and service systems with risk averse customers"
17:40–18:00	G.GKONTEVAS (Hellenic Army General Staff) "The use of systemic methodologies in the operation of a Army Headquarters: VSM of Beer, DCSYM, Vensim, Anylogic"	E.G.KYRIAKIDIS ⁽¹⁾ , T.D.DIMITRAKOS ⁽²⁾ and C.KARAMATSOUKIS ⁽³⁾ ^(1,2) University of the Aegean and ⁽³⁾ Hellenic Military Academy "A finite-horizon single vehicle routing problem with a predefined sequence of customers, delivery of two similar products and stochastic demands"
18:00–18:20	E.S.PASSAS (Hellenic Naval General Staff) "Naval combat model as decision aiding tool"	I.ISSARIS (Omicron Systems) "Controls, Performance and Risks: integration, complexity and implications for Artificial Intelligence"
18:20–18:40	A.LAZOPOULOS ⁽¹⁾ and D.KARAOLANIS ⁽²⁾ ⁽¹⁾ Hellenic Military Academy and ⁽²⁾ National Technical University of Athens "On L-fractional derivatives and L-fractional homogeneous equations"	T.ZIKOS ⁽¹⁾ , N.KARAMPERAS ⁽²⁾ , D.ZAIRES ⁽³⁾ and A.TSIGKAS ⁽⁴⁾ ^(1,2,3) Hellenic Army General Staff and ⁽⁴⁾ Democritus University of Thrace "On the utilization of Radio Frequency Identification (RFID) technology in supply chain management and its application in the Hellenic Military Logistics System (HMLS)"
18:40–18:50	General Discussion & Comments	
19:00	CLOSING STATEMENT	

SCHEDULE	OPTIMA CONFERENCE PROGRAM V 1.1 / Friday, MAY 26, 2017 (MORNING)	
8:00–9:00	Participants arrival	
	<i>All A Sessions in “Penteas” Amphitheatre</i>	<i>All B Sessions in “Chrisofakis” Amphitheatre</i>
9:00–10:30	Session 1A: CRYPTOGRAPHY chair: <i>Demetrius S. Triantafyllou</i>	Session 1B: ELECTRONIC CRIME AND ETHICS chair: <i>Stamatia Sofiou</i>
9:00–9:20	E.PAKA⁽¹⁾ and K.HAVENETIDIS⁽²⁾ ^{(1),(2)} Hellenic Military Academy	A.PAPATHANASIOU⁽¹⁾, G.GERMANOS⁽²⁾ and A.PEPPA⁽²⁾ ^{(1),(2)} Hellenic Police and ⁽³⁾ University of the Aegean
9:20–9:40	<i>“Biometric systems for personal identification: Potential threats on the accuracy of the measurements”</i>	<i>“Cloud forensics latest technical and legal challenges for law enforcement authorities (LEAs), CERTs and security specialists”</i>
9:40–10:00	G. MELETIOU⁽¹⁾, S.A.N.ALEXANDROPOULOS⁽²⁾, D. S. TRIANTAFYLLOU⁽³⁾ and M.N.VRAHATIS⁽⁴⁾ ⁽¹⁾ A.T.E.I. of Epirus, ⁽²⁾ Hellenic Military Academy and ^(3,4) University of Patra	S.SALAMOURAS⁽¹⁾ and A.ANDREATOS⁽²⁾ ^{(1),(2)} Hellenic Air Force Academy
10:00–10:20	<i>“Bottom-up hierarchical ramp secret sharing scheme”</i>	<i>“A tool for network traffic forensics analysis”</i>
10:20–10:30	C.STYLIANAKIS (University of Glasgow)	A.ANDREATOS (Hellenic Air Force Academy)
10:40–10:50	<i>“On the congruence subgroups of braid groups”</i>	<i>“A tool facilitating Linux forensics”</i>
10:50–11:00	G.MARINAKIS (National Intelligence Service)	S.SOFIOU (Hellenic Military Academy)
10:20–10:30	General Discussion & Comments	General Discussion & Comments
10:40–10:50	Coffee Break / Commemorative Photo	
10:50–11:00	Commemorative Photo	
11:00–12:30	Session 2A: INTERNET OF THINGS (IoT) chair: <i>Nikolaos Bardis</i>	Session 2B: ELECTRONIC WARFARE chair: <i>Konstantinos Zikidis</i>
11:00–11:20	N.KOUKOULAS⁽¹⁾, N.E.PAPADAKIS⁽²⁾, G.GARDIKIS⁽³⁾ and S.COSTICOGLOU⁽⁴⁾ ^{(1),(2,3,4)} Space Hellas	A.KAKAROUNTAS (University of Thessaly)
11:20–11:40	<i>“Smart city tracking: enhancing security empowered by people”</i>	<i>“Totally self-checking circuits and systems as a mean to confront electronic war in cryptographic equipment”</i>
11:40–12:00	D.P.IRACLEOUS⁽¹⁾, A.KARASOULOU⁽²⁾, A.KOLLAN⁽³⁾ and A.WARE⁽⁴⁾ ⁽¹⁾ Hellenic Military Academy, ⁽²⁾ National and Kapodistrian University of Athens and ^(3,4) University of South Wales	P.NOMIKOS⁽¹⁾, D.OIKONOMOU⁽²⁾, G.LIMNAIOS⁽³⁾ and K.ZIKIDIS⁽⁴⁾ ^{(1),(2),(3),(4)} Hellenic Air Force Academy
12:00–12:20	<i>“Consensus-based data fusion in military IoT / multi agent system paradigm”</i>	<i>“Passive Radars and their use in the Modern Battlefield”</i>
12:20–12:30	N.BARDIS (Hellenic Military Academy)	G.GAITANAKIS⁽¹⁾, A.VLASTARAS⁽²⁾, N.VASSOS⁽³⁾, G.LIMNAIOS⁽⁴⁾ and K.ZIKIDIS⁽⁵⁾ ⁽¹⁾ Hellenic Military Academy and ^(2,3,4,5) Hellenic Air Force Academy
12:30–13:50	<i>“Security issues and reliability for IoT”</i>	K.GIOLDASIS (Hellenic Naval General Staff)
12:00–12:20	A.BELESOTIS⁽¹⁾, D.SKOUTAS⁽²⁾, K.PATROUMPAS⁽³⁾ and V.CAFFES⁽⁴⁾ ^{(1),(2),(3),(4)} Athena RIC	<i>“Survey of a random communications plan by utilization of characteristic variable parameters”</i>
12:20–12:30	<i>“Mapping crime hotspots and safer routes”</i>	General Discussion & Comments
12:20–12:30	Coffee Break	
12:30–13:50	Session 3A: PRIVACY chair: <i>Vassileios V. Vlachos</i>	Session 3B: SURVEILLANCE AND MONITORING chair: <i>Michael Gargalakos</i>
12:30–12:50	Y.STAMATIOU⁽¹⁾, A.MADJA⁽²⁾, V.VLACHOS⁽³⁾ and S.NIKOLETSEAS⁽⁴⁾ ^(1,2,4) University of Patras, ^(2,3,4) Computer Technology Institute & Press “DIOPHANTOS”, ⁽³⁾ A.T.E.I. of Thessaly	N.DOUKAS (Hellenic Military Academy)
12:50–13:10	<i>“Privacy Flag: crowdsourcing privacy and data security risks”</i>	<i>“Light field image processing for surveillance”</i>
13:10–13:40	K.MARKANTONAKIS⁽¹⁾, R.N.AKRAM⁽²⁾ and Iak.GURULLAN⁽³⁾ ^(1,2,3) University of London	A.KYRITSIS⁽¹⁾, R.MAKRI⁽²⁾, M. GARGALAKOS⁽³⁾ and N.UZUNOGLU⁽⁴⁾ ^(1,4) NTUA, ⁽²⁾ Institute of Communications and Computer Systems (ICCS) and ⁽³⁾ Hellenic Military Academy
13:40–13:50	<i>“Security and Privacy Challenges in Wireless Avionics Networks and Swarm of Drones”</i>	<i>“Active and passive methods for the detection of drones and small airborne objects”</i>
13:10–13:40	Conference Lecture given in the Closing of Morning Sessions (Amphitheatre “PENTEAS”) R.ROLLAND and A.BONNECAZE (Aix-Marseille Université /INRIA France)	
13:40–13:50	<i>“Blind transfer of personal data insuring privacy”</i>	
13:50–14:30	General Discussion & Comments	General Discussion & Comments
	LUNCH BREAK	

SCHEDULE	OPTIMA CONFERENCE PROGRAM V 1.1 / FRIDAY, MAY 26, 2017 (AFTERNOON)	
14:30–15:00	Conference Lecture given in the Opening of Afternoon Sessions (Amphitheatre “PENTEAS”) J.L.LANET (Université deLimoges /INRIA France)	
	<i>“When Data reveals ransomware activity”</i>	
	<i>All A Sessions in “Penteas” Amphitheatre</i>	<i>All B Sessions in “Chrisofakis” Amphitheatre</i>
15:00–16:30	Session 4A: ENHANCED COMMAND AND CONTROL SYSTEMS FOR INCREASED SITUATIONAL AWARENESS IN AIR, LAND AND SEA INTEGRATING HETEROGENEOUS SURVEILLANCE ASSETS AND SERVICES chair: <i>Nikolaos K. Papadakis</i>	Session 4B: AUTONOMY chair: <i>Georgios P.Kladis</i>
15:00–15:20	N.K.PAPADAKIS⁽¹⁾ and A.LITKE⁽²⁾ ⁽¹⁾ Hellenic Military Academy and ⁽²⁾ INFILI Technologies	A.CHOURZAMANIS⁽¹⁾, Io.C.TZANIS⁽²⁾, Chr.K.VOLOSO⁽³⁾, Io. STOUMBOULOS⁽⁴⁾ and Io. M. KYPRIANIDIS⁽⁵⁾ ^(1,2,3,4,5) Aristotle University of Thessaloniki
15:20–15:40	<i>“Video streaming of real-time crime incidents in a context-aware and personalised environment”</i>	<i>“Aerial Drone for Landmine Detection”</i>
15:20–15:40	K.RAFTOPOULOS⁽¹⁾ and N.K.PAPADAKIS⁽²⁾ ⁽¹⁾ NTUA and ⁽²⁾ Hellenic Military Academy	M.SMYRNAKIS⁽¹⁾ and G. P.KLADIS⁽²⁾ ⁽¹⁾ University of Sheffield and ⁽²⁾ Hellenic Military Academy
15:40–16:00	<i>“Resisting deceptive jammers with radar shadow analysis”</i>	<i>“Distributed Selection of Flight Formation for UAV Missions”</i>
15:40–16:00	P.KATSELIS⁽¹⁾, D.MAKRIS⁽²⁾ and D.PARASCHOS⁽³⁾ ^(1,2,3) Hellenic Military Academy	G. P.KLADIS⁽¹⁾ and F.PANTAZOGLOU⁽²⁾ ⁽¹⁾ Hellenic Military Academy and ⁽²⁾ Institute of Oceanography
16:00–16:20	<i>“The “Brasidas” Unmanned Ground System”</i>	<i>“Trajectory tracking for submersible unmanned vehicles missions: A Takagi-Sugeno framework”</i>
16:20–16:30	A.LITKE⁽¹⁾ and N.K.PAPADAKIS⁽²⁾ and D.PAPADOPOULOS⁽³⁾ ⁽¹⁾ INFILI Technologies and ^(2,3) Hellenic Military Academy	D.BOTONIS (Hellenic Army General Staff/Military Academy)
16:30–16:40	<i>“SHIELD-securing against intruders and other threats through a NEV-enabled environment”</i>	<i>“Design of a smart - device controlled unmanned vehicle”</i>
16:30–16:40	Coffee Break	
16:40–17:50	Session 5A: CYBER SECURITY TECHNOLOGY chair: <i>Nikolaos Doukas</i>	Session 5B: ENGINEERED SYSTEMS' STRUCTURAL DESIGN chair: <i>Konstantinos P. Stamoulis</i>
16:40–17:00	E.DONTAS⁽¹⁾ and N.DOUKAS⁽²⁾ ⁽¹⁾ Hellenic Army General Staff and ⁽²⁾ Hellenic Military Academy	T.TRIANTAFYLLOU⁽¹⁾ and K.P.STAMOULIS⁽²⁾ ^(1,2) Hellenic Air Force General Staff and ⁽²⁾ Hellenic Military Academy
17:00–17:20	<i>“Algorithmic Selection for Social Media Data Mining”</i>	<i>“Structural Design of a Rocket Motor Thrust Testing System”</i>
17:00–17:20	J.BOTHOS⁽¹⁾, A.ZALONIS⁽²⁾, V.VLACHOS⁽³⁾, Y.STAMATIOU⁽⁴⁾, A.MADJA⁽⁵⁾, S.THOMOPOULOS⁽⁶⁾ and S.NIKOLETSEAS⁽⁷⁾ ^(1,2,6) NCSR “DEMOKRITOS”, ^(4,5,7) University of Patras, ^(3,4,5,7) Computer Technology Institute & Press “DIOPHANTOS”, ⁽³⁾ A.T.E.I. of Thessaly	S.SATHANASIADIS⁽¹⁾ and N.UZUNOGLU⁽²⁾ ^(1,2) National and Technical University of Athens (NTUA))
17:20–17:40	<i>“Probing digital black markets: A new approach to cyber-security”</i>	<i>“Design and development of a Log-periodic monopole array installed on top of a vehicle”</i>
17:20–17:40	A.PSALLIDAS⁽¹⁾ and C.PAVLATOS⁽²⁾ ^(1,2) Hellenic Air Force Academy	S.GEORGANTZINOS (Hellenic Military Academy / University of Patra)
17:40–17:50	<i>“Parallel hardware implementation of an RSA cryptosystem”</i>	<i>“A CAD/CAE technique for an efficient prediction of bearings design fatigue life”</i>
17:40–17:50	General Discussion & Comments	General Discussion & Comments
18:00–18:20	Closing Conference Lecture (Amphitheatre “PENTEAS”) Io.N.ILLAS (School of Hellenic Police Officers/ Democritus University of Thrace)	
	<i>“Electronic / Informational War and personal data: Conceptual delimitation, terms and limits of their offense”</i>	
18:20	CLOSING STATEMENTS AND REGARDS	