

iMAF 2021 Syndicate 7 Elaborations on : State of the art and future possibilities

Lisbon 20th-23rd September 2021
Academia Militar

7 Participants from 6 institutions

Ass. Prof. I. Templalexis

Topics:

- What is achieved so far in LoD14
- Why conduct research within military institutions
- Bring together EDF interested parties
- Formulate the K2 Partnership
- Define a process to prompt IG members to publish in

What is achieved so far in LoD14

- Two Parallel theses launched since September 2021

Title of thesis A: Crowd Density and Number Estimation from UAV footage using Deep Learning Algorithms (HAFA)

Title of Thesis B: Machine vision enabled unmanned vehicle control software (MUT)

Supervisor Thesis A: Panagiotis Karampelas, Panagiotis Aposporis

Supervisor Thesis B: Konrad Wojtowicz

Title of thesis A: Benchmarking of F100-PW-229 engine models (HAFA)

Title of thesis B: Simulation of the F100-PW-229 turbofan in the Gasturb (MUT)

Supervisor: As. Prof. I Templalexis

Supervisor: Prof. Ryszard Chachurski

- Clear communication plan to stimulate interest regarding parallel theses.

Why conduct research within military institutions

- Compulsory for tertiary **education** institutes
- Prerequisite for accreditation
- Produce new knowledge to support curriculum update
- Acquire the skill of doing research
- Money inflow
- Bridge between the end user (armed forces) and the technological and industrial base

Formulate a K2 Partnership: “European Military Higher Education Institutes Research Network for collaboration and knowledge exchange”

Goals:

- Locate and contact researchers according to their expertise to form solid collaboration schemes.
- Promote long term researchers mobilities
- Disseminate experience through peer learning schemes

Indicative Deliverables:

- Gap analysis between EU Defense research priorities and current military academies research activities
- Map the current level of resources (labs, researchers, etc.)
- Establish peer learning schemes and / or workshops to disseminate knowledge
- Develop IT tool to ease the researchers networking (ontology)

Next Step: Prepare a proposal draft and share it with IG members.

Bring together EDF interested parties

Organize a two-day meeting and invite one research representative per institute.

Day 1 Present research capabilities and competences regarding EDF partnerships

Day 2 Present best practices out of experience – Keynote speeches

Thank you

Define a process to engage existing Journals into IG Members

- Identify Journals. Record their characteristics
- Define possible overlaps of scientific areas as well scientific areas which are not addressed
- Invite people in charge to present their Journal during the upcoming R&D meeting.