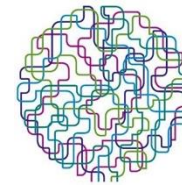# *University Passau & IntelliSem*

Adamantios Koumpis

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This presentation is for

☒ **Workshop 1** Big Data
☐ **Workshop 3** Photonics and Micro-and-Nanoelectronics
☐ **Workshop 2** Robotics
☐ **Workshop 4** internet of Things

Description of the Organization

Lehrstuhl für Informatik mit Schwerpunkt Digital Libraries and Web Information Systems:

- Excellence in semantic technologies
  - With a specialisation in distributional semantics
- Excellence in natural language processing
  - With a specialization in statistical based NLP
- Participation in H2020 projects
  - MARIO project http://www.mario-project.eu/
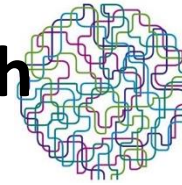 - SSIX project http://www.ssix-project.eu/

IntelliSem - www.intellisem.de

- Spin-out / start-up established by members of the University group a product orientation: StarGraph
  - A NoSQL platform that interacts with large-scale and heterogeneous data & knowledge graphs using natural language queries and search operations
  - Currently StarGraph already supports 13 major languages
  - Works as a "Google" for structured/semi-structured data, in which users can search and query heterogeneous data
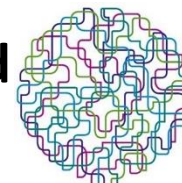
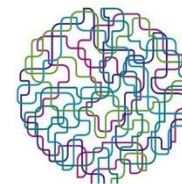# Description of the team and the research interests

- **Prof Dr Siegfried Handschuh** at the University of Passau where he holds the Chair of Digital Libraries and Web Information Systems. Before taking the Chair of Computer Science with a focus on Digital Libraries and Web Information Systems, Prof Handschuh has been Professor at the National University of Ireland, Galway (NUIG) and leader of the Knowledge Discovery Unit, at the Digital Enterprise Research Institute (DERI).

- **Dr. André Freitas** is a post-doctoral researcher and lecturer at the Natural Language Processing and Semantic Computing Group at the University of Passau (Germany) at the Chair of Digital Libraries and Web Information Systems. He is also a partner and co-founder at Amtera Semantic Technologies in Brazil/USA. Before joining Passau, he was part of the Digital Enterprise Research Institute (DERI) at the National University of Ireland, Galway where he did his PhD on Schema-agnostic Query Mechanisms for Large-Schema Databases.

- **Dr Adamantios Koumpis** carries an over 20 years of experience in commercial projects, research fundraising and business development. He headed the Research Programmes Division of ALTEC Software S.A. in Greece which he founded in 1996 (then as Unisoft of Northern Greece) which he led till 2012 that took a position as Research Fellow in the National University of Ireland, Galway. He has successfully led more than 50 commercial and research projects for new technology development, technology adoption and user uptake, both at the European and the national level in several areas such as E-Commerce, public sector and business enterprise re-organisation and ERP systems implementation.
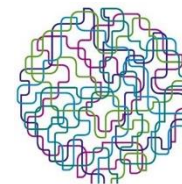
- Objectives:
  - to maintain referential regulatory transnational data facilitating business within the supply chain of cosmetic / food / pharma / chemicals sectors
  - same data partially enriched could be used for the food sector and so forth.
  - In that chain there are a big amount of data needed to verify the quality of products and processes at each stage :
    - Specifications to follow
    - Regulatory constraints
    - Manufacturing good practices
    - Raw material traceability
- Expected results:
  - Deployment in different languages
  - Synthesis of various specifications results to support management of data comprising regulatory and other conformance criteria issued by different authorities in various countries of Europe or elsewhere (USA, Asia,…) including also non regulatory data that are mostly chemical families of substances, provided from raw materials traceability, etc.
  - The industrial users at a specific level of the supply chain should be able to downstream own information towards the Purchasers or upwards to their Suppliers
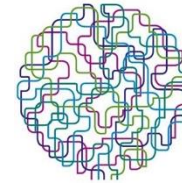
Consortium - profile of known partners

No	Partner Name	Type	Country	Role in the Project
01	Big Data Analytics research institute	RTD	EU	Coordinator
02	Uni Passau	RTD	D	NLP – distributional semantics
03	Provider of Big Data analytics platform	IND	IE	Technology platform provider
04	International Hellenic University	RTD	EL	Semantic Interoperability
05	IntelliSem	SME	D	Technology platform provider
06	Technology branding and exploitation	SME	UK	Innovation management and technology financing
07				
08				

Consortium - required partners

No	Expertise	Type	Country	Role in the project
01	Pilot application in food	IND		Pilot deployment
02	Pilot application in pharmaceuticals	IND		Pilot deployment
03	Pilot application in cosmetics	IND		Pilot deployment
04	Pilot application in chemicals	IND		Pilot deployment
05	ICT consultancies with expertise in the above sectors	SME		Support in the profiling of the services and the integration
06	NLP R&TD partners	RTD & SME		Offer of technologies and support in the development of the showcases
07				
08				

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[*www.intellisem.de*](http://www.intellisem.de)