

Curriculum  
Vitae

2024

Dr. Konstantinos Kotis

## Contents

<b>Summary</b>	<b>4</b>
<b>Researcher Details:</b>	<b>6</b>
<b>2. Studies</b>	<b>6</b>
<b>2.1 Higher Education</b>	<b>6</b>
<b>2.2 Seminars</b>	<b>7</b>
<b>3. Professional appointments</b>	<b>7</b>
<b>3.1 Recent appointments</b>	<b>7</b>
3.1.1 (Sept. 2024-today) Director of Postgraduate studies, Cultural Informatics and Communication, Dept. of Cultural Technology and Communication, University of the Aegean	7
3.1.2 (Sept. 2023 - today) Associate Professor, Dept. of Cultural Technology and Communication, University of the Aegean	7
3.1.3 (January 2019 – July 2023) Assistant Professor, Dept. of Cultural Technology and Communication, University of the Aegean	7
3.1.5 (late 2017 – early 2018) Sr. Researcher, Dept. of Computer Science, University of Houston	7
3.1.6 (2016 - 2018) Lectureship, Postgraduate Program, Department of Digital Systems, University of Piraeus, Greece (part-time)	7
3.1.7 (2013 - today) Research Associate, AI Lab, Department of Digital Systems, University of Piraeus, Greece (part-time)	8
3.1.8 (2000–2018) Head of IT dept., North Aegean Region Administrative Authorities (NARA), Samos, Greece (full-time)	8
<b>3.2 Past appointments</b>	<b>8</b>
<b>3.2.1 (20011-12) Post-Doc Researcher at VTT, Finland (ERCIM fellowship, Marie Curie and ABCDE program)</b>	<b>8</b>
<b>3.2.2 (2006-2010) Lecturer/Researcher Department of Information and Communications Systems Eng., University of the Aegean</b>	<b>8</b>
3.2.2.1 Lectureship (2009 -2010)	8
3.2.2.2 Lectureship (2008 - 2009)	8
3.2.2.3 Assistant Professorship (2007 - 2008)	9
3.2.2.4 Lectureship (2006 - 2007)	9
<b>3.2.3 (2005-2006) Post-Doc Researcher, Ai-Lab, Department of Information and Communications Systems Engineering, University of the Aegean</b>	<b>9</b>
<b>4. Participation in Research and Development Projects</b>	<b>9</b>
<b>4.1 International-EU Research projects</b>	<b>9</b>
<b>4.2 National Research and Development projects (in Greek)</b>	<b>11</b>
<b>5. Scholarly and Scientific Activities</b>	<b>13</b>
<b>5.1 Invited Talks, Presentations, Posters</b>	<b>13</b>
<b>5.2 Reviewing/Editing responsibilities</b>	<b>13</b>
<b>5.3 Thesis/Dissertation Supervision/co-Supervision</b>	<b>14</b>
<b>5.4 Other academic and professional activities</b>	<b>17</b>
<b>6. List of publications</b>	<b>18</b>
<b>6.1 In Journals</b>	<b>18</b>
<b>6.2 In Books</b>	<b>24</b>

<b>6.3 In Conferences</b>	<hr/> 24
<b>6.4 Research monographs (from the list of publications)</b>	<hr/> 28
<b>6.5 Other publications</b>	<hr/> 29
<b>6.6 Books</b>	<hr/> 29

## Summary

**Konstantinos Kotis** (ORCID <https://orcid.org/0000-0001-7838-9691>) owns a B.Sc. in Computation from University of Manchester (UMIST), UK and a Ph.D. in Information Management (Knowledge Representation & Management) from the University of the Aegean, Greece. He is currently a tenure track associate professor at the Dept. of Cultural Technology and Communication of the University of the Aegean, a member of the Intelligent Systems Lab, and a research associate of the Dept. of Digital Systems of the University of Piraeus (a member of the AI lab). He is currently leading the Semantic Web and IoT research group of i-Lab (<https://i-lab.aegean.gr/groups/semantic-technologies-group/>). His research interests include but not limited to Knowledge Engineering, Semantic data management, Semantic IoT, KG-based Conversational AI. He has published more than 100 papers (Google Scholar h-index:23, >2300 citations) in peer-reviewed international journals (incl. IJDST, KAIS, ILE, IJKEDM, FGCS, IEEE IS, IJWGS, IJMSO, Applied AI) and conferences (incl. ESWC, ISWC, KSEM, IJCAI, VLDB) and served as reviewer and reviewer in several journals and conference events (incl. IEEE IS, IEEE TKDE, ACM TIoT, KAIS, JWS, J.UCS, IJDMMM, ICTAI, IJCAI). He has also participated in several national and international projects, including among them, Grid4All (FP7, 2008), iCore (FP7, 2012), Internet of Things (Finnish Tivit/Tekes, 2012), AMINESS (Greek Research & Technology General Secretary, 2014), datAcron (H2020, 2016), Time Machine (H2020, 2019), GreenHeritage (Erasmus LS, 2022), FAIR-PReSONS (JUST, 2024).

**Teaching keywords:** AI (info. retrieval, knowledge engineering, semantic web, ontologies), Software Engineering (OO development, (semantic) Web development, Mobile apps), Data Science (semantic data management), Internet/Web of Things (semantic modeling, semantic interoperability).

**Research keywords:** Knowledge/Ontology Engineering, Semantic Web and applications, Semantic Data management (RDFization, alignment, integration, visualization), Semantic Interoperability in IoT, Ontology-Based Data Access and Integration, Linked Data, KGs and Conversational AI, LLMs.

**Technical keywords:** Ontology Alignment Framework, JENA, OWL API, Linked Open Data, Java, XML, XSD, XSLT, RDF, OWL, SPARQL, C#, HTML, CSS, WordPress, JavaScript, PHP.

### Memberships:

- Computer Applications and Quantitative Methods in Archaeology – Greece (CAA-GR / CAA Greece)
- W3C Community/Working Groups: Web of Things, Schema Extensions for IoT
- Hellenic Society of Artificial Intelligence (EETN),
- Marie Curie Association Alumni (MCAA),
- Time Machine Organization (TMO)

### Awards:

- ERCIM “Allain Bensoussan” (Marie-Curie) fellowship at post-doc level (VTT Technical Research Center of Finland, 2011-12), EU
- **Best paper award:** A. [Pliatsios](#), [C. Goumopoulos](#), and [K. Kotis](#), "[Interoperability in IoT: A vital key factor to create the “Social Network” of Things](#)", Thirteenth International Conference on Mobile Ubiquitous Computing, Systems, Services and Technologies, UBICOMM 2019, Porto, IARA, 09/2019.
- **Best paper award:** Educational AI Chatbots for Content and Language Integrated Learning by Kleopatra Mageira, Dimitra Pittou, Andreas Papasalouros, Konstantinos Kotis, Paraskevi Zangogianni and Athanasios Daradoumis, <https://www.mdpi.com/journal/applsci/awards/2191>



## 1. Personal Details

**Name:** Konstantinos  
**Last Name:** Kotis  
**Birth Date:** 5-03-1973  
**Birthplace:** Samos, Greece  
**Nationality:** Greek  
**Languages:** Greek (native), English (fluent), German (basic)  
**Marital Status:** Married, 2 children  
**Home Address:** S. Choutzaiou 9A, Lesvos, Greece  
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**E-mail:** kotis@aegean.gr, kotis.kostas@gmail.com  
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**Skype:** kotis\_konstantinos  
**LinkedIn:** <http://gr.linkedin.com/in/kotis>  
**Twitter:** <https://twitter.com/KotisK>

### **Researcher Details:**

**Web of Science ResearcherID:** B-1883-2009

**Scopus Author ID:** 8951329800

**Orchid ID:** 0000-0001-7838-9691

Publons: <https://publons.com/researcher/2870237/konstantinos-kotis/>

Orchid: <https://orcid.org/0000-0001-7838-9691>

## 2. Studies

### **2.1 Higher Education**

- (2000-2005) PhD in Information Management, Department of Information and Communications Systems Engineering, University of the Aegean, Greece. (Grade: "Excellent")  
PhD title: "Design and Implementation of collaborative and human-centered ontology engineering environments".  
Supervisor: Prof. George A. Vouros, University of the Aegean.  
Research outcomes: state-of-the-art human-centered collaborative ontology engineering methodology (HCOME) and a prototype system.
- (1992-1995) Bachelor degree (BSc Hons) in Computation, University of Manchester Institute of Science and Technology, UK. (Class 2:2).
- (1990-1992) College Degree in Computation, KORELKO college, Athens, Greece

## **2.2 Seminars**

- (11/2015) Training in Management of Departments, National Centre for Public Administration and Local Government (EKDDA), Samos (5 days)
- (10/2015) 3<sup>rd</sup> GCC Seminar: A Cyber Crime Centre of Excellence for Training, Research and Education in Greece (Ministry of Internal Affairs), Athens (2 days)
- (11/2014) Advanced Training in eLearning (for tutors), National Centre for Public Administration and Local Government (EKDDA), Athens (2 weeks)
- (02/2013) e-Government and Citizens, National Centre for Public Administration and Local Government (EKDDA), Athens (5 days)
- (10/2012) ERCIM ABCDE Seminar II, Marie-Curie Action, Sophia Antipolis, INRIA, FR (2 days)

## **3. Professional appointments**

### **3.1 Recent appointments**

**3.1.1 (Sept. 2024-today) Director of Postgraduate studies, Cultural Informatics and Communication, Dept. of Cultural Technology and Communication, University of the Aegean**

**3.1.2 (Sept. 2023 - today) Associate Professor, Dept. of Cultural Technology and Communication, University of the Aegean**

**3.1.3 (January 2019 – July 2023) Assistant Professor, Dept. of Cultural Technology and Communication, University of the Aegean**

- Full time professor and member of the Intelligent Systems Labs (Lesvos island, Greece):

#### **Undergraduate courses:**

- 1st year: Internet Technologies (**Dept. of Cultural Tech and Comm.**)
- 2nd year: Design and Development of Web sites and applications (**Dept. of Cultural Tech and Comm.**)
- 3rd year: Web Programming (**Dept. of Cultural Tech and Comm.**)
- 4th year: Semantic Web and IoT (**Dept. of Cultural Tech and Comm.**)

#### **Postgraduate courses:**

- Semantic Web and IoT (**Dept. of Information and Comm. Eng., and Dept. of Cultural Tech and Comm.**)
- Web and Digital Culture (**Dept. of Cultural Tech and Comm.**)

**3.1.5 (late 2017 – early 2018) Sr. Researcher, Dept. of Computer Science, University of Houston**

- Research, management and students' supervision at Computational Biomedicine Lab (CBL), and Borders, Trade and Immigration (BTI) Institute.

**3.1.6 (2016 - 2018) Lectureship, Postgraduate Program, Department of Digital**

**Systems, University of Piraeus, Greece (part-time)**

- Web Applications (HTML/WordPress, XML, RDF) course at e-Learning Postgraduate Program

**3.1.7 (2013 - today) Research Associate, AI Lab, Department of Digital Systems, University of Piraeus, Greece (part-time)**

- Research on semantic data management (RDFization, alignment, integration of data using semantic technologies), semantic interoperability and trust in smart environments/IoT, and Ontology-Based Data Access (OBDA) and Integration.
- Research projects (e.g. national project AMINESS, H2020 project dataACRON) and proposals' preparation for H2020 (Cyber-Physical Systems, IoT and Big Data).
- Lecturing at Postgraduate level (Course: Web Applications).

**3.1.8 (2000 – 2018) Head of IT dept., North Aegean Region Administrative Authorities (NARA), Samos, Greece (full-time)**

- IT management
- Development projects' management
- Software/Web Sites development (WordPress, Joomla), Open Linked Data (D2RQ OBDA platform, SPARQL, RDF)

**3.2 Past appointments**

**3.2.1 (20011-12) Post-Doc Researcher at VTT, Finland (ERCIM fellowship, Marie Curie and ABCDE program)**

- One-year research program on 'semantic interoperability and smart environments'. The goal of the research program was to propose methods for automatically aligning smart entities (devices and software) in the Semantic Web of Things.

**3.2.2 (2006-2010) Lecturer/Researcher Department of Information and Communications Systems Eng., University of the Aegean**

**3.2.2.1 Lectureship (2009 -2010)**

- "Software Engineering" course in the Graduate School of the Department of Information and Communications Systems Eng., University of the Aegean
- "Knowledge Engineering" course in the Graduate School of the Department of Information and Communications Systems Eng., University of the Aegean
- "Ontologies and the Semantic Web" course in the Postgraduate School of the Department of Information and Communications Systems Eng., University of the Aegean

**3.2.2.2 Lectureship (2008 - 2009)**

- "Software Engineering" course in the Graduate School of the Department of Information and Communications Systems Eng., University of the Aegean
- "Knowledge Engineering" course in the Graduate School of the Department of

Information and Communications Systems Eng., University of the Aegean

- “Ontologies and the Semantic Web” course in the Postgraduate School of the Department of Information and Communications Systems Eng., University of the Aegean

### **3.2.2.3 Assistant Professorship (2007 - 2008)**

- “Ontologies and the Semantic Web” course in the Postgraduate School of the Department of Information and Communications Systems Eng., University of the Aegean
- “Databases” course in the Graduate School of the Department of Information and Communications Systems Eng., University of the Aegean

### **3.2.2.4 Lectureship (2006 - 2007)**

- “Software Engineering” course in the Graduate School of the Department of Information and Communications Systems Eng., University of the Aegean
- “Ontologies and the Semantic Web” course in the Postgraduate School of the Department of Information and Communications Systems Eng., University of the Aegean

### **3.2.3 (2005-2006) Post-Doc Researcher, Ai-Lab, Department of Information and Communications Systems Engineering, University of the Aegean**

- Research in “Knowledge Representation and Resource Description Languages”, Postgraduate Studies Department, Department of Information and Communications Systems Eng., University of the Aegean (Research and Lecturing activities).
- Design and implementation of an Ontology Mapping tool (AUTOMS: AUTomated Ontology Mapping through Synthesis of approaches)
- Participation in the design and Implementation of AUTOMS-F: Framework for AUTomated Ontology Mapping through Synthesis of approaches
- Participation in the Ontology Alignment Evaluation Initiative (OAEI) 2006 Contest, evaluating AUTOMS tool (4th place among 10 participants) and presentation of results in Ontology Matching International Workshop, Atlanta USA, 2006
- Invited Lectures in “Ontologies and Schema Languages on Semantic Web”, Postgraduate Course, Department of Information and Communications Systems Eng., University of the Aegean

## **4. Participation in Research and Development Projects**

### **4.1 International-EU Research projects**

- FAIR-PReSONS: Fair predictions of gender-sensitive recidivism, EU JUST project
  - Role: Project coordinator, project manager, WP2 team leader
  - Period: 2024-2026
- GreenHeritage: The impact of Climate Change on the Intangible Cultural Heritage, Erasmus-LS project

- Role: ICT VLE tool development, Course development and teaching (Web ICT tools for intangible cultural heritage preservation)
  - Period: 2022-2025
- RE-SAMPLE: REal-time data monitoring for Shared, Adaptive, Multi-domain and Personalised prediction and decision making for Long-term Pulmonary care, H2020 project
  - Role: research and development in Task 4.2, 4.5 (knowledge modeling)
  - Period:: 2021-2025
- Time Machine: Big Data of the Past for the Future of Europe, H2020 Coordination and support action (CSA) – FETFLAG-2018-01
  - Role(s): co-author in Task 2.2 (Computation and AI)
  - Period: 2019-2020
- dataACRON: Big Data Analytics for Time Critical Mobility Forecasting, H2020 project
  - Role(s): proposal preparation, research on 'semantic annotation of streams'
  - Period: 2016-2019
- AMINESS: "Analysis of Marine Information for Environmentally-Safe Shipping", Greek General Secretariat for Research and Technology (GSRT) (Link: <http://aminess.eu/>)
  - Role(s): research and development
  - Period: 2013-2015
- iCore: "Empowering IoT through Cognitive Technologies ", FP7 project (Link: <http://www.iot-icore.eu/>)
  - Role(s): research and development
  - Period: 2011-2012
- Internet of Things, Finnish TEKES project: (Link: <http://www.internetofthings.fi/proj>)
  - Role(s): research and development
  - Period: 2011-2012
- "Usefil: Unobtrusive Smart Environments for Independent Living", FP7 project (<http://usefil.eu/>)
  - Role(s): research
  - Period: 2011-2012
- "OntoSum: Ontology Management and exploitation for text summarization". Project code: 1576, University of the Aegean, Research Funding Committee of Greece.
  - Role(s): research and development
  - Period: 2006-2008
- "Grid4All: democratize the Grid" Project no. 034567, Specific Targeted Research Project (STREP) IST project, FP6
  - Role(s): research
  - Period: 2006-2008

## 4.2 National Research and Development projects (in Greek)

Τίτλος	Προϋπολογισμός/ Χρηματοδότηση	Έναρξη	Υπεύθυνη Υπηρεσία/ Ρόλος	Κωδ. Έργου
Ηλεκτρονική Πύλη Εξυπηρέτησης Πολιτών της Ν.Α Σάμου	233.910,00€ (ΠΕΠ Β. ΑΙΓΑΙΟΥ)	2007	Δ/νση Πληροφορικής ΝΑ Σάμου/ Προετοιμασία και υποβολή πρότασης, Διοίκηση Έργου	87375
Ψηφιοποίηση πολιτιστικής-πολιτισμικής παράδοσης της Σάμου	266.401,07€ (ΠΕΠ Β. ΑΙΓΑΙΟΥ)	2007	Δ/νση Πληροφορικής ΝΑ Σάμου/ Προετοιμασία και υποβολή πρότασης, Διοίκηση Έργου	114904
Ενέργειες Ενημέρωσης και Ευαισθητοποίησης των πολιτών για την Ψηφιακή Σύγκληση	48.994,10€ (Γ' ΚΠΣ)	2008	Δ/νση Πληροφορικής ΝΑ Σάμου/ Προετοιμασία και υποβολή πρότασης, Διοίκηση Έργου	126764
Ανάπτυξη και Διάθεση Εφαρμογών Ηλεκτρονικής Επικοινωνίας και Ηλεκτρονικής Συμμετοχής για την Προώθηση της Ευρυζωνικότητας στη Νομαρχιακή Αυτοδιοίκηση Σάμου	312.363,10€ (Γ' ΚΠΣ)	2009	Δ/νση Πληροφορικής ΝΑ Σάμου/ Προετοιμασία και υποβολή πρότασης, Διοίκηση Έργου, Ανάπτυξη Οντολογιών	302766
Παρουσίαση Μνημείων μέσω Διαδικτύου και DVD: Εκκλησία Αγίου Κηρύκου και Ιαματικές πηγές Ικαρίας	139.002,00€ (Interreg)	2007	Δ/νση Πληροφορικής ΝΑ Σάμου/ Προετοιμασία και υποβολή πρότασης, Διοίκηση Έργου	103534
Πρόληψη και περιστολή θαλάσσιας ρύπανσης σε εμπορικούς και τουριστικούς λιμένες (PREMARPOL)	147.500,00€ (Interreg)	2011	Τμήμα Πληροφορικής ΠΕ Σάμου/ Προετοιμασία και υποβολή πρότασης, Διοίκηση Έργου, Ανάπτυξη συστήματος αξιοποίησης δεδομένων	901032
DigiArc: Ψηφιακό Τόξο Πολιτισμού Ελλάδας – Κύπρου : Διάσωση και ανάδειξη της Μεσαιωνικής Πολιτισμικής Κληρονομιάς στην νησιωτική περιοχή του Αιγαίου και της Κύπρου	INTERREG V-A «Ελλάδα Κύπρος 2014-2020»	2019	Παν. Αιγαίου, Τ.Π.Τ.Ε. / Διοίκηση Έργου, Διαχείριση Περιεχομένου, Web	
Re-CULT: Ανάδειξη και διάδοση της πολιτιστικής και φυσικής κληρονομιάς μέσα από την ανάπτυξη και θεσμική ενίσχυση του Θρησκευτικού Τουρισμού στη νησιωτική περιοχή της Ελλάδας και της Κύπρου	INTERREG V-A «Ελλάδα Κύπρος 2014-2020»	2019	Παν. Αιγαίου, Τ.Π.Τ.Ε. / Ανάπτυξη Εργαλείων ICT, Ψηφιοποίηση και τεκμηρίωση	

Ψηφιακές Διαδρομές Σαμιακού Οίνου: Το κρασί σαν μέσο προβολής και προώθησης του πολιτιστικού αποθέματος της Σάμου	Επιχειρησιακό Πρόγραμμα «Βόρειο Αιγαίο 2014-2020	2019	Τμήμα Πληροφορικής ΠΕ Σάμου/ Προετοιμασία και υποβολή πρότασης	5032640
Ενίσχυση της αντίληψης χρωμάτων σε ψηφιοποιημένους πίνακες τέχνης για άτομα με Ανεπάρκεια Χρωματικής Όρασης	Ε.Π. «Ανάπτυξη Ανθρώπινου Δυναμικού, Εκπαίδευση και Διά Βίου Μάθηση», με την συγχρηματοδότηση της Ελλάδας και της Ευρωπαϊκής Ένωσης	2019	Παν. Αιγαίου, Τ.Π.Τ.Ε. / Αναπληρωτής Επιστημονικός Υπεύθυνος	
MemoBot: «Συνομιλώντας με τον Καζαντζάκη: Έξυπνες εμπειρίες Μεικτής Πραγματικότητας»	Ερευνώ-Δημιουργώ-Καινοτομώ (ΕΠΑνΕΚ), Παρέμβαση I	2020	Παν. Αιγαίου, Τ.Π.Τ.Ε. / Υπεργολάβος, Επιστημονικός Υπεύθυνος: Παροχή υπηρεσιών έρευνας και ανάπτυξης πλατφόρμας AI chatbot βασισμένη σε μεθόδους Μηχανικής Μάθησης, Επεξεργασίας Φυσικής Γλώσσας, και Γράφων Γνώσης	T2ΕΔΚ-03334 ΕΛΕ ΠΑ - 80331
IMOCS: «Έξυπνη Ανοιχτή Δημιουργική Πλατφόρμα Μουσείων»	Ερευνώ-Δημιουργώ-Καινοτομώ (ΕΠΑνΕΚ), Παρέμβαση I	2020	Παν. Αιγαίου, Τ.Π.Τ.Ε. / Υπεργολάβος, Μηχανική Γνώσης	T2ΕΔΚ-00047
MuBot: «Έξυπνος ξεναγός σε Μουσεία»	Επιχειρησιακό Πρόγραμμα Περιφέρειας Κρήτης, Έρευνα και ανάπτυξη από ΜΜΕ, σε τομείς της RIS3Crete	2020	Παν. Αιγαίου, Τ.Π.Τ.Ε. / Υπεργολάβος, Μηχανική Γνώσης	
PaloAnalytics: Συνδρομητική πλατφόρμα ανάλυσης μεγάλου αριθμού διαδικτυακών αναφορών, εύρεσης insights και επιχειρηματικών ευκαιριών σε πολυγλωσσικό περιβάλλον	Ερευνώ-Δημιουργώ-Καινοτομώ (ΕΠΑνΕΚ), Παρέμβαση II	2020	Παν. Αιγαίου, Τ.Π.Τ.Ε. / Ερευνητής, Ε3: Ανάπτυξη μηχανισμών εξαγωγής πληροφορίας από τα πρωτογενή δεδομένα	2989
Promote: Τεχνολογίες Πειθούς στον Τουρισμό	Επιχειρησιακό Πρόγραμμα Περιφέρειας Β. Αιγαίου 2014-2020"	2021	Παν. Αιγαίου, Τ.Π.Τ.Ε. / Υπεργολάβος, Μηχανική Γνώσης	MIS 5093219
Σύμπραξη Καινοτόμων Δράσεων Τουρισμού Υπαίθρου (JoInOuT)	Πρόγραμμα «Ανταγωνιστικότητα Επιχειρηματικότητα και Καινοτομία 2014-2020», ΣΥΝΕΡΓΑΤΙΚΟΙ ΣΧΗΜΑΤΙΣΜΟΙ ΚΑΙΝΟΤΟΜΙΑΣ/ΣΣΚ	2022	Παν. Αιγαίου, Τ.Π.Τ.Ε. / Υπεργολάβος, Διαχείριση Πληροφορίας και την Επιχειρηματική Ευφυία	ΓΓ2CL-0359457

## **5. Scholarly and Scientific Activities**

### **5.1 Invited Talks, Presentations, Posters**

- SenZations Summer School on Internet of Things - SenZations2020, SCHOOL OF SOCIAL SCIENCES - Department of Cultural Technology and Communication, 29 Jun 2020 to 3 Jul 2020, Lesvos (topic: Semantic Web and IoT)
- Invited talk in “IoT meets AI: Technologies and Perspectives”, University of the Aegean, Ai-Lab, Samos May 2016.
- Invited talk in “Sem. Interoperability in IoT”, Ontology Summit 2015 ([http://ontolog-02.cim3.net/wiki/ConferenceCall\\_2015\\_03\\_05](http://ontolog-02.cim3.net/wiki/ConferenceCall_2015_03_05))
- Invited talk (in Greek) in “Ontology Engineering”, University of the Aegean, Ai-Lab, Samos, Dec. 2013
- Invited talk in “Semantic Interoperability on the Internet of Things”, University of the Aegean, Ai-Lab, Samos, May 2013
- Presentation in “Ontology Alignment for IoT interoperability”, IoT project review meeting (TEKES, FI), 2012
- Presentation in “AUTOMSV2 and ASE tools for OAEI 2012”, OM Workshop, ISWC 2012, Boston, 2012
- Presentation in “Semantic Interoperability in iCore project”, IERC AC4 Semantic interoperability Workshop – 19&20th of June 2012, IoT-Week, Venice, 2012
- Invited talks in “Ontology Eng. in the Semantic Web era”, Knowledge Engineering and Semantic Web postgraduate program at University of the Aegean, Samos, 2010
- Invited talks in “Ontology Eng. in the Semantic Web era”, Knowledge Engineering Summer School, Samos, July 2008
- Invited talks in “Ontologies and Schema Languages on Semantic Web”, University of the Aegean, Ai-Lab, Samos, 2005
- Invited talks in “Ontology Engineering: Tools and Methodologies for constructing and managing ontologies”, University of the Aegean, Ai-Lab, Samos, Dec. 2004
- Invited talks in “Knowledge Management and Organizational Memories”, University of the Aegean, Ai-Lab, Samos, June 2001

### **5.2 Reviewing/Editing responsibilities**

#### **Editorials**

- Guest Editor: a special issue of Big Data and Cognitive Computing (ISSN 2504-2289) on Semantic Web Technologies and Recommender Systems, MDPI ([https://www.mdpi.com/journal/BDCC/special\\_issues/semweb\\_tech](https://www.mdpi.com/journal/BDCC/special_issues/semweb_tech))
- Editorial board: Journal of Artificial Intelligence Advances (ISSN: 2661-3220 Online)
- Executive Editor: Journal of Internet of Things and Cyber-Assurance (ISSN: 2059-7975 Online)
- Editorial board: Konstantinos Kotis and John Soldatos (eds), *UBICOMM 2019: The Thirteenth International Conference on Mobile Ubiquitous Computing, Systems, Services and Technologies*, Sept. 22 - 26 2019, Porto, Portugal, ISBN: 978-1-61208-736-8.

#### **Reviewer in journals (incl.):**

Journal of Data and Knowledge Eng., The Knowledge Engineering Review (Cambridge), Expert Systems With Applications (ESWA), Multimodal Technologies and Interaction (MDPI), Sensors (MDPI), Social Network Analysis and Mining (SNAM, Springer), ACM Transactions in IoT, Artificial Intelligence Advances Journal, Knowledge Engineering Review Journal, International Journal of Metadata, Semantics and Ontologies (IJMSO), The Computer Journal, AI Review journal, IEEE Intelligent Systems, IEEE TKDE, the IEEE Transactions on Industrial Informatics, KAIS (Knowledge and Information Systems) Journal, Journal of Web Semantics (JWS), J.UCS - Special Issue in "Ontologies and their Applications", Encyclopedia of Data Warehousing and Mining - 2nd Edition.

More in Publons: <https://publons.com/researcher/2870237/konstantinos-kotis/>

#### **Reviewer in conferences (incl.):**

International Conference on Artificial Intelligence Applications and Innovations (AIAI), International Joint Conference on Knowledge Discovery, Knowledge Engineering and Knowledge Management (KEOD), International Conference on Research Challenges in Information Science (RCIS), International Conference on Real-Time Intelligent Systems (RTIS), International Conference on Emerging Ubiquitous Systems and Pervasive Networks (EUSPN), International Joint Conference of AI, ANT, UBICOM, IEEE Industrial Systems, International Conference on Knowledge Science, Engineering and Management (KSEM), AAAI-15, ICTAI-2014, AI-IoT 2018, The First International Workshop on Extending Seamlessly to the Internet of Things (esIoT-2012), International Conference on Complex, Intelligent, and Software Intensive Systems (CISIS), IADIS conference on WWW/Internet, IEEE International Conference on Tools with Artificial Intelligence (ICTAI), Workshop of Ontologies And Their Applications (Brazil), AI Conference, SGAI International Conference on Innovative Techniques and Applications of Artificial Intelligence (Cambridge, UK), Workshop of Ontology Alignment and Visualization (OnAV08), World Summit on the Knowledge Society, Workshop on Community- based Evolution of Knowledge-intensive Systems (COMBEK), International Symposium on Information Technologies in Environmental Engineering.

#### **5.3 Thesis/Dissertation Supervision/co-Supervision**

Τίτλος/Title	Φοιτητής/ Student	Έτος/ Year	Επίπεδο / Level	Ρόλος/ Role
Unbiased prediction of women's recidivism: A study on female prisons' archives. Link(s): <a href="#">[related paper A]</a>	Σπύρου Σταμάτης	2021	Post Doc	Supervisor /Επίβλεψη
AI dialogue and QA softbots (AI chatbots) in the Digital Culture domain. Link(s): [thesis abstract] [Thesis] [Presentation] [System] <a href="#">[related paper A]</a> <a href="#">[related paper B]</a>	Βαριτιμιάδης Σάββας	2019	PhD	Supervisor /Επίβλεψη
Event prediction based on semantic sentiment analytics of big data in social media networks. Link(s): <a href="#">[related paper A]</a>	Θεοχαρόπουλος Χάρης	2020	PhD	Supervisor /Επίβλεψη
Semantic trajectory analytics and Recommendation systems. Link(s): <a href="#">[related paper A]</a> <a href="#">[related paper B]</a>	Αγγελής Σωτήρης	2020	PhD	Supervisor /Επίβλεψη

Revealing Common Mechanisms Between Neurodegenerative Diseases and Artistic Behaviors Using Fuzzy Knowledge Representation. <b>Link(s):</b> [related paper A]	Κωλέτης Α.	2021	PhD	Supervisor /Επίβλεψη
Semantic interoperability and real-time automated reasoning in IoT-enabled edge devices and swarms of drones. <b>Link(s):</b> [related paper A]	Σουλαρίδης Α.	2023	PhD	Supervisor /Επίβλεψη
Analysis of Data from smart wearable devices for effective patient monitoring: an intelligent system for monitoring patients with mobility problems <b>Link(s):</b> [related paper A]	Μπίτιλης Π.	2022	PhD	Supervisor /Επίβλεψη
Internet of Things and interoperability through semantic knowledge representation in the form of ontologies for smart city applications. <b>Link(s):</b> [related paper A] [Related paper B]	Πλιάτσιος Αντώνιος Επιβλ.: Γκουμόπουλος Χ.	2019	PhD	Advisor/ Τριμελή Επιτροπή
Knowledge representation/ontologies on the domain of artworks conservation. <b>Link(s):</b> [related paper A] [Related paper B]	Μωραΐτου Ευθυμία Επιβλ.: Καρυδάκης Γ.	2019	PhD	Advisor/ Τριμελή Επιτροπή
Mining and analyzing information in public documents using deep machine learning and natural language processing.	Αραμπατζής Γερμανήλ Επιβλ.: Καρυδάκης Γ.	2020	PhD	Advisor/ Τριμελή Επιτροπή
Object recognition in art paintings using deep learning neural networks.	Τροχίδης Επιβλ.: Τσεκούρας Γ.	2021	PhD	Advisor/ Τριμελή Επιτροπή
Development of a methodology for mapping and identifying privacy and security issues in the Internet of Cloud (IoC).	Τσουπλάκη Α. Επιβλ.: Καλλονιάτης Χ.	2022	PhD	Advisor/ Τριμελή Επιτροπή
Development of a methodology for accepting technological transition and best practice solutions (end-to-end) for the new industrial revolution (Industry 4.0), intelligent and immersive technologies.	Στεργίου Γ. Επιβλ.: Καβακλή Β.	2022	PhD	Advisor/ Τριμελή Επιτροπή
Semantic integration of cultural data from heterogeneous sources. <b>Link(s):</b> [thesis abstract] [Thesis] [Presentation] (in Greek) [System] [related paper A]	Αγγελής Σωτήρης	2019	MSc	Supervisor / Επίβλεψη
Generate and publish open and linked cultural data for Android mobile apps. <b>Link(s):</b> [Thesis] [Presentation]	Μουζάκης Παναγιώτης	2019	MSc	Supervisor /Επίβλεψη
Design and development of educational AI chatbot for museums. <b>Link(s):</b> [System] [Thesis] [Presentation]	Μάγειρα Κ.-Πιπού Δ.	2020	MSc	Supervisor /Επίβλεψη
Creation of searchable, open, interoperable, machine-readable, reliable and reusable digital content and data. The role of cultural heritage aggregators. <b>Link(s):</b> [System (DSpace)] [System (SearchCulture.gr - EKT)] [Thesis]	Κωστελίδου Δ.	2020	MSc	Supervisor /Επίβλεψη

Digitizing, documenting, semantically annotating and publishing cultural content in the Semantic Web. <b>Link(s):</b> <a href="#">[LOD]</a> <a href="#">[Thesis]</a> <a href="#">[Presentation]</a> <a href="#">[related paper]</a>	Μαρίνη - Χονδρογιάννη	2020	MSc	Supervisor /Επίβλεψη
Semantic Interoperability of Smart Cultural Spaces. <b>Link(s):</b> [System] [Thesis] [Presentation] <a href="#">[related paper A]</a> <a href="#">[related paper B]</a>	Ζαχίλα Κωνσταντίνα	2020	MSc	Supervisor /Επίβλεψη
Fair Knowledge Representation in surveillance applications. <b>Link(s):</b> [System] [Thesis] [Presentation] <a href="#">[related paper A]</a> <a href="#">[related paper B]</a>	Παπαρίδης Βαγγέλης	2020	MSc	Supervisor /Επίβλεψη
e-Gov 3.0: E-gov, CP systems and IoT.	Σάμιος Θ.	2021	MSc	Supervisor /Επίβλεψη
Semantic Modeling and Simulation of cyber-security and interoperability issues in swarms of unmanned marine vehicles (UMVs). <b>Link(s):</b> <a href="#">[related paper A]</a>	Σταυρινός Σ.	2021	MSc	Supervisor /Επίβλεψη
Semantic trajectories' analytics and visualization in swarms of unmanned aerial vehicles (UAVs). <b>Link(s):</b> <a href="#">[related paper A]</a>	Σουλαρίδης Α.	2021	MSc	Supervisor /Επίβλεψη
Engineering ontology and KG for PD monitoring and alerting. <b>Link(s):</b> <a href="#">[related paper A]</a> <a href="#">[related paper B]</a>	Ζαφειρόπουλος Ν.	2023	MSc	Supervisor /Επίβλεψη
Handling bias in Twitter/X analytics. <b>Link(s):</b> <a href="#">[related paper A]</a> <a href="#">[related paper B]</a>	Καρακικές Α.	2023	MSc	Supervisor /Επίβλεψη
Smart mobile app: Silence bot.	Ζώτος Θοδωρής, Τσοχαταρίδης Σωκράτης	2020	BSc	Supervisor /Επίβλεψη
Content Management Systems (CMS) for cultural content preservation and dissemination .	Κοντελές Κων/νος, Τρούμπη Ιωάννα	2020	BSc	Supervisor /Επίβλεψη
Smart mobile FB app: Family bot.	Ιωσηφίδης Κυριάκος	2020	BSc	Supervisor /Επίβλεψη
Creating Semantic Web of Data sites with JSON-LD. <b>Link(s):</b> <a href="#">[Thesis]</a> <a href="#">[Presentation]</a>	Μαρκόπουλος Θανάσης	2020	BSc	Supervisor /Επίβλεψη
Beyond traditional Web Search: Semantic Web search, Dataset Search, Culture Search, IoT Search engines.	Σταύρου Άννα	2020	BSc	Supervisor /Επίβλεψη
Social Internet of Things (SIoT) and smart objects	Κωνσταντινίδου Στελίνα	2020	BSc	Supervisor /Επίβλεψη
Developing an ontology-based AI Chatbot: the case of Covid-19 chatbot.	Δημάκη Δ., Χριστέλη Κ.	2021	BSc	Supervisor /Επίβλεψη

Cultural events information Web app for people with disabilities (sign language recognition). Link(s): <a href="#">[System]</a>	Αυγουστόπουλος Δημήτριος, Καλδέλλης Μάριος, Κωστάρας Αντρέας	2021	BSc	Supervisor /Επίβλεψη
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#### **Before 2019 (UoA, Dept. of ICSD):**

- “Semantic Information System for the trading of resources and services”, MSc thesis
- “Semantic Matchmaking of WSDL Web Services”, MSc thesis
- “Automatic Multiple-Choice Questions construction using domain ontologies”, MSc thesis
- “Semantic Web Portal Technology: a case study using MScProgram.owl ontology”
- “Semantic Wikis for Web-based Collaborative Ontology engineering”

#### **5.4 Other academic and professional activities**

- Teaching activities of 20 hours (IoT, Web Design) at the Dept. of Informatics, Faculty of Economics and Management, Czech University of Life Sciences Prague, Dec. 2023.
- Visiting professor (research and teaching on Semantic Web technologies) in IUT, University of Paris 8, France, 6 Nov. to 6 Dec. 2023.
- Erasmus teaching of 8 hours (Semantic IoT) at the Dept. of Information Eng., Faculty of Economics and Management, Czech University of Life Sciences Prague, Apr. 2023.
- Erasmus teaching of 8 hours (Semantic Web), Department of Mathematics and Computer Sciences, Università degli Studi di Catania, 25/04/2022 to 29/04/2022.
- PC member at Connected-Data.World (CDW), i-Lab partnership representative, 2022.
- Lecturing at SenZations Summer School on Internet of Things - SenZations2020, SCHOOL OF SOCIAL SCIENCES - Department of Cultural Technology and Communication, 29 Jun 2020 to 3 Jul 2020, Lesvos.
- i-Lab representative in Time Machine Organization (TMO) and Time Machine H2020 CSA project (Big Data of the Past).
- Coordinator and Co-chair of UBICOMM 2019 special track on “Semantic Web and IoT”.
- Coordinator and Co-chair of International Conference on Emerging Ubiquitous Systems and Pervasive Networks, “Semantic Web” track, EUSPN 2016 London
- Coordinator and co-chair of the 1sth International Workshop in “Intelligent Systems for Environmental (Knowledge) Engineering and EcoInformatics” (i-SEEK'09), CISIS 2009, Fukuoka.
- Co-organizer of OAEI contest 2011 track ‘Oriented Matching’.
- Vocational training instructor - EKEPIS Certified Trainer in Information Technology since 2001, Greece.
- High School (Lyceum) instructor in Information Technology, 1997-1999, Samos, Greece.

## 6. List of publications

### 6.1 In Journals

1. Assimakopoulos, F.; Vassilakis, C.; Margaris, D.; Kotis, K.; Spiliotopoulos, D. The Implementation of “Smart” Technologies in the Agricultural Sector: A Review. *Information* **2024**, *15*, 466. <https://doi.org/10.3390/info15080466>
2. Ziku, M.; Kotis, K.; Pavlogeorgatos, G.; Kavakli, E.; Zeeri, C.; Caridakis, G. Evaluating Crowdsourcing Applications with Map-Based Storytelling Capabilities in Cultural Heritage. *Heritage* **2024**, *7*, 3429-3454. <https://doi.org/10.3390/heritage7070162>
3. Karakikes, A., Alexiadis, P. & Kotis, K. Bias in X (Twitter) and Telegram Based Intelligence Analysis: Exploring Challenges and Potential Mitigating Roles of AI. *SN COMPUT. SCI.* **5**, 574 (2024). <https://doi.org/10.1007/s42979-024-02935-w>
4. Efthymia Moraitou, Yannis Christodoulou, Konstantinos Kotis, and George Caridakis. 2024. An Ontology-Based Framework for Supporting Decision-Making in Conservation and Restoration Interventions for Cultural Heritage. *J. Comput. Cult. Herit.* **17**, *3*, Article 41 (September 2024), 24 pages. <https://doi.org/10.1145/3653977>
5. Angelis, S., Moraitou, E., Caridakis, G. K. Kotis. CHEKG: a collaborative and hybrid methodology for engineering modular and fair domain-specific knowledge graphs. *Knowl Inf Syst* **66**, 4899–4925 (2024). <https://doi.org/10.1007/s10115-024-02110-w>
6. Soularidis, A.; Kotis, K.I.; Vouros, G.A. Real-Time Semantic Data Integration and Reasoning in Life- and Time-Critical Decision Support Systems. *Electronics* **2024**, *13*, 526. <https://doi.org/10.3390/electronics13030526>

(Impact Factor: 2.9, CiteScore: 4.7)
7. Zafeiropoulos, N.; Bitilis, P.; Tsekouras, G.E.; Kotis, K. Evaluating Ontology-Based PD Monitoring and Alerting in Personal Health Knowledge Graphs and Graph Neural Networks. *Information* **2024**, *15*, 100. <https://doi.org/10.3390/info15020100>

(Impact Factor: 3.1, CiteScore: 5.8)
8. Zafeiropoulos, N.; Bitilis, P.; Tsekouras, G.E.; Kotis, K. Graph Neural Networks for Parkinson’s Disease Monitoring and Alerting. *Sensors* **2023**, *23*, 8936. <https://doi.org/10.3390/s23218936>

(Impact Factor: 3.9, CiteScore: 6.8)
9. Remountakis, M.; Kotis, K.; Kourtzis, B.; Tsekouras, G.E. Using ChatGPT and Persuasive Technology for Personalized Recommendation Messages in Hotel Upselling. *Information* **2023**, *14*, 504. <https://doi.org/10.3390/info14090504>

(Impact Factor: 3.1, CiteScore: 5.8)
10. Bouras, V.; Spiliotopoulos, D.; Margaris, D.; Vassilakis, C.; Kotis, K.; Antoniou, A.; Lepouras, G.; Wallace, M.; Poulopoulos, V. Chatbots for Cultural Venues: A Topic-Based Approach. *Algorithms* **2023**, *16*, 339. <https://doi.org/10.3390/a16070339>

(Impact Factor: 2.3, CiteScore: 3.7)

11. Koletis, A.; Bitilis, P.; Zafeiropoulos, N.; Kotis, K. Can Semantics Uncover Hidden Relations between Neurodegenerative Diseases and Artistic Behaviors? *Appl. Sci.* **2023**, *13*, 4287. <https://doi.org/10.3390/app13074287>.  
 (Impact Factor: 2.8, CiteScore: 3.7)
12. Pliatsios, A.; Kotis, K.; Goumopoulos C. A Systematic Review on Semantic Interoperability in the IoE-enabled Smart Cities. *Internet of Things*, **2023**. <https://doi.org/10.1016/j.iot.2023.100754>.  
 (Impact Factor: 5.7, CiteScore: 10.2)
13. Kotis, K.; Angelis, S.; Moraitou, E.; Kopsachilis, V.; Papadopoulou, E.-E.; Soulakellis, N.; Vaitis, M. A KG-Based Integrated UAV Approach for Engineering Semantic Trajectories in the Cultural Heritage Documentation Domain. *Remote Sens.* **2023**, *15*, 821. <https://doi.org/10.3390/rs15030821>.  
 (Impact Factor: 5.349, CiteScore: 7.4)
14. Kotis, K.; Soularidis, A. ReconTraj4Drones: A Framework for the Reconstruction and Semantic Modeling of UAVs' Trajectories on MovingPandas. *Appl. Sci.* **2023**, *13*, 670. <https://doi.org/10.3390/app13010670>.  
 (Impact Factor: 2.838, CiteScore: 3.7)
15. Kotis, K.; Dimara, A.; Angelis, S.; Michailidis, P.; Michailidis, I.; Anagnostopoulos, C.-N.; Krnidis, S.; Kosmatopoulos, E. Towards Optimal Planning for Green, Smart, and Semantically Enriched Cultural Tours. *Smart Cities* **2023**, *6*, 123–136. <https://doi.org/10.3390/smartcities6010007>.  
 (Impact Factor: 6.4, CiteScore: 5.5)
16. Kotis, K.; Stavrinou, S.; Kalloniatis, C. Review on Semantic Modeling and Simulation of Cybersecurity and Interoperability on the Internet of Underwater Things. *Future Internet* **2023**, *15*, 11. <https://doi.org/10.3390/fi15010011>.  
 (Impact Factor: 3.4, CiteScore: 5.4)
17. Dimara, A.; Vasilopoulos, V.-G.; Papaioannou, A.; Angelis, S.; Kotis, K.; Anagnostopoulos, C.-N.; Krnidis, S.; Ioannidis, D.; Tzovaras, D. Self-Healing of Semantically Interoperable Smart and Prescriptive Edge Devices in IoT. *Appl. Sci.* **2022**, *12*, 11650. <https://doi.org/10.3390/app122211650>  
 Impact factor: 2.838, CiteScore: 5.5, Scopus: 3.7  
 (Special Issue: IoT in Smart Cities and Homes)
18. Santipantakis, G., Kotis, K., Glenis, A., Vouros, G. A., Doulkeridis, C., Vlachou, A., RDF-Gen: Generating RDF Triples from Big Data Sources, Knowledge and Information Systems (KAIS) journal, vol. 64, issue 11, 2985–3015, **2022**, Springer. <https://doi.org/10.1007/s10115-022-01729-x>.  
 Impact factor: 3.161 (5-year), CiteScore: 5.5, Scopus: NA
19. Koletis A, Markopoulos A, Kotis K. Discovering Semantic Relations between Neurodegenerative Diseases and Artistic Behaviors. *Challenges*. 2022; 13(2):36. <https://doi.org/10.3390/challe13020036>

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|--|----------------|-----|-----------|---------|----|
|  | Impact factor: | NA, | CiteScore | Scopus: | NA |
|--|----------------|-----|-----------|---------|----|
20. Mulita, F., Verras, G., Anagnostopoulos, C-N., Kotis, K., A Smarter Health through the Internet of Surgical Things, Sensors, 22(12), 4577, **2022**, MDPI. <https://doi.org/10.3390/s22124577>  
 Impact factor: 3.847, CiteScore Scopus: NA. Special Issue [IoT Multi Sensors](#)
21. Mageira, K., D. Pittou, A. Papasalouros, K. Kotis, P. Zangogianni, and A. Daradoumis, "Educational AI Chatbots for Content and Language Integrated Learning", Applied Sciences, vol. 12, issue 7, **2022**. <https://doi.org/10.3390/app12073239>  
 Impact factor: 2.679, CiteScore Scopus: 3  
 (Collection: [The Application and Development of E-learning](#))
22. Kotis, K. D-h-index: a linked data quality metric. Academia Letters, Article 2903, **2021**. <https://doi.org/10.20935/AL2903>.  
 Impact factor: NA, CiteScore Scopus: NA  
 Kotis, K. Artificial General Intelligence and Creative Economy. Academia Letters, **2021**. <https://doi.org/10.20935/AL260>
23. Angelis S., Kotis K., Mouzakis P., [Interlinking and enrichment of disparate organisational data with LOD at applications run-time](#). International Journal of Metadata, Semantics and Ontologies, 15(3), pp.204-219 **2021**. <https://doi.org/10.1504/IJMSO.2021.123043>  
 Impact factor: N/A, CiteScore Scopus: 1.2
24. Angelis, S.; Kotis, K.; Spiliotopoulos, D. Semantic Trajectory Analytics and Recommender Systems in Cultural Spaces. *Big Data Cogn. Comput.* **2021**, 5, 80. <https://doi.org/10.3390/bdcc5040080>  
 Impact factor: 3.7, CiteScore Scopus: 4.9  
 (Special Issue: [Semantic Web Technology and Recommender Systems](#))
25. Zachila, K.; Kotis, K.; Paparidis, E.; Ladikou, S.; Spiliotopoulos, D. Facilitating Semantic Interoperability of Trustworthy IoT Entities in Cultural Spaces: The Smart Museum Ontology. *IoT* **2021**, 2(4), pp.741-760. <https://doi.org/10.3390/iot2040037>  
 New Journal (first Issue)
26. Varitimidis, S.; Kotis, K.; Pittou, D.; Konstantakis, G. Graph-Based Conversational AI: Towards a Distributed and Collaborative Multi-Chatbot Approach for Museums. *Appl. Sci.* **2021**, 11(19), 9160. <https://doi.org/10.3390/app11199160>  
 Impact factor: 2.679, CiteScore Scopus: 3  
 (Special Issue [Advanced Technologies in Digitizing Cultural Heritage](#))
27. Kotis K., Angelis S., Chondrogianni M., Marini E., "Children's art museum collections as Linked Open Data", International Journal of Metadata, Semantics and Ontologies, 15(1), pp. 60-70, 08/2021 <http://doi.org/10.1504/IJMSO.2021.10040249>

Impact factor: N/A, CiteScore Scopus: 1

28. Sikelis K, Tsekouras GE, Kotis K. Ontology-Based Feature Selection: A Survey. *Future Internet*. 2021; 13(6):158. <https://doi.org/10.3390/fi13060158>  
Impact factor: 3.4, CiteScore Scopus: 4.1  
(Special Issue [Software Engineering and Data Science](#))
29. Kotis K., Zachila K., Paparidis E., "Machine Learning meets the Semantic Web", *Artificial Intelligence Advances*, 3(1), 2021 <https://doi.org/10.30564/aia.v3i1.3178>.  
Impact factor: N/A, CiteScore Scopus: N/A.
30. Tsekouras, G.; Rigos, A.; Chatzistamatis, S.; Tsimikas, J.; Kotis, K.; Caridakis, G.; Anagnostopoulos, C. A Novel Approach to Image Recoloring for Color Vision Deficiency. *Sensors* **2021**, *21*(8), 2740; <https://doi.org/10.3390/s21082740>.  
Impact factor: 3.576, CiteScore Scopus: N/A.  
(Special Issue [Machine Learning and AI for Sensors](#))
31. Kalloniatis, Ch., Diamantopoulou, V., Kotis, K., Lyvas, Ch., Maliatsos, K., Gay M., Kanatas, A. and Lambrinoudakis, C., "Towards the design of an assurance framework for increasing security and privacy in Connected Vehicles", *Int. J. of Internet of Things and Cyber-Assurance*, vol. 1, issue 3, pp. 244-266, **2020**. <https://doi.org/10.1504/IJITCA.2020.10034103>.  
Impact factor: N/A, CiteScore Scopus: N/A.
32. Pliatsios A., Goumopoulos C., Kotis K., "A Review on IoT Frameworks Supporting Multi-Level Interoperability—The Semantic Social Network of Things Framework", *International Journal on Advances in Internet Technology*, ISSN 1942-2652, vol.13, no.1&2, **2020**, pp. 46-64.  
Impact factor: N/A, CiteScore Scopus: N/A.
33. Kotis, K.; Spiliotopoulos, D.; Papasalouros, A. Intelligent Collaborative Authoring of Place-Based, Cross-Cultural and Media-Rich Experiences. *Challenges* **2020**, *11*, 1, pp. 10. <https://doi.org/10.3390/challe11010010>  
Impact factor: N/A, CiteScore Scopus: N/A.
34. Vassilakis, C.; Kotis, K.; Spiliotopoulos, D.; Margaris, D.; Kasapakis, V.; Anagnostopoulos, C.-N.; Santipantakis, G.; Vouros, G.A.; Kotsilieris, T.; Petukhova, V.; Malchanau, A.; Lykourentzou, I.; Helin, K.M.; Revenko, A.; Gligoric, N.; Pokric, B. A Semantic Mixed Reality Framework for Shared Cultural Experiences Ecosystems. *Big Data Cogn. Comput.* **2020**, *4*, 6. <https://doi.org/10.3390/bdcc4020006>  
Impact factor: 3.7, CiteScore Scopus: 4.3.  
(This article belongs to the Special Issue [Big Data Analytics for Cultural Heritage](#))
35. Kotis, K., Vouros, G., & Spiliotopoulos, D. (2020). Ontology engineering methodologies for the evolution of living and reused ontologies: Status, trends, findings and recommendations. *The Knowledge Engineering Review*, 35, E4. **2020**. <https://doi.org/10.1017/S0269888920000065>

- Impact factor: 1.115, CiteScore Scopus: N/A.
36. Kotis, K., "ARTIST - A reAl-time low-effoRt multi-entity Interaction System for creaTing reusable and optimized MR experiences", Research Ideas and Outcomes, 5: e36128. **2019** <https://doi.org/10.3897/rio.5.e36128>
- Impact factor: N/A, CiteScore Scopus: N/A.
37. Kotis, K., I. Athanasakis, and G. A. Vouros, "Semantically Enabling IoT Trust to Ensure and Secure Deployment of IoT Entities," Int. J. of Internet of Things and Cyber-Assurance, vol. 1, issue 1: Inderscience, pp. 3-21, **2018**
- Impact factor: N/A, CiteScore Scopus: N/A
38. Santipantakis, G., K. Kotis, and G. A. Vouros, "OBDAIR: Ontology-Based Distributed framework for Accessing, Integrating and Reasoning with data in disparate data sources", Expert Systems with Applications, vol. 90, pp. 464 - 483, **2017**, <https://doi.org/10.1016/j.eswa.2017.08.031>
- Impact factor: 6.954, CiteScore Scopus: 12.7
39. Kotis, K., and A. Katasonov, "Semantic Interoperability on the Internet of Things: The Semantic Smart Gateway Framework," International Journal of Distributed Systems and Technologies (IJDST), vol. 4, issue 3, pp. 47-69, **2013**, <https://doi.org/10.4018/jdst.2013070104>
- Impact factor: 0.92, CiteScore Scopus: N/A
40. Kotis, K., A. Papasalouros, G. A. Vouros, N. Pappas, and K. Zoumpatianos, "Enhancing the Collective Knowledge for the Engineering of Ontologies in Open and Socially Constructed Learning Spaces," Journal of Universal Computer Science, vol. 17, issue 12, pp. 1710—1742, **2012**, <http://dx.doi.org/10.3217/jucs-017-12-1710>
- Impact factor: 0.91, CiteScore Scopus: N/A
41. K. Kotis, A. Papasalouros, E. Maragkoudakis, "Mining Query Logs for Learning Useful Ontologies: an Incentive to SW Content Creation," International Journal for Knowledge Engineering and Data Mining (IJKEDM), vol. 1, issue 4, pp. 303-330, **2011**
- Impact factor: N/A, CiteScore Scopus: N/A
42. S. Karetso, D. Charalampopoulos, K. Kotis, "An Ontology-based framework for Authoring Tools in the Domain of Sustainable Energy Education," International Journal of Agricultural and Environmental Information Systems (IJAEIS), Special issue on Intelligent Systems for Engineering Environmental Knowledge, vol. 2, issue 1, **2011**
- Impact factor: N/A, CiteScore Scopus: N/A
43. A. Papasalouros, K. Kotis, K. Kanaris, "Automatic generation of tests from domain and multimedia ontologies," Interactive Learning Environments journal, Special issue on "Semantic Technologies for Multimedia-enhanced Learning Environments", vol. 19, issue 1: Taylor & Francis, pp. 5-23, **2011**, <https://doi.org/10.1080/10494820.2011.528704>

Impact factor: 3.928, CiteScore Scopus: 5.1

44. G. Vouros, A. Papasalouros, K. Tzonas, A. Valarakos, K. Kotis, P. Valdoriez, P. Lamarre, H. Quiané-Ruiz, "A Semantic Information System for Services and Traded Resources in Grid e-Markets," Future Generation Computer Systems, Elsevier, Vol. on-line, **2010**, <https://doi.org/10.1016/j.future.2010.03.004>

Impact factor: 7.187, CiteScore Scopus: 13.3

45. A. Papasalouros, K. Kotis, N. Nikitakos, "Towards an Intelligent tutoring system for Environmental Decision Makers," Environmental Engineering and Management Journal (EEMJ), Special Issue on Artificial Intelligence Applications in Environmental Protection, Technical University of Iasi, Vol. 9, No. 2, pp. 197-204, **2010**

Impact factor: N/A, CiteScore Scopus: N/A

46. M. Lanzenberger, J. Sampson, H. Kargl, M. Wimmer, C. Conroy, D. O'Sullivan, D. Lewis, R. Brennan, J. Ángel R. Gargantilla, A. Gómez-Pérez, F. Fürst, F. Trichet, J. Euzenat, A. Polleres, F. Scharffe, K. Kotis, "Making Ontologies Talk: Knowledge Interoperability in the Semantic Web," IEEE Intelligent Systems vol. 23, no. 6, pp. 72-85, 2008, <https://doi.org/10.1109/MIS.2008.108>

Impact factor: 3.405, CiteScore Scopus: 9

47. G. A. Vouros, A. Papasalouros, K. Kotis, A. Valarakos, K. Tzonas, X. Vilajosana, R. Krishnaswamy, N. Amara-Hachmi, "The Grid4All ontology for the retrieval of traded resources in a market-oriented Grid," Special issue on Web/Grid Information and Services Discovery and Management, Int. J. Web and Grid Services, vol. 4, no. 4, pp. 418-439, 2008, <https://doi.org/10.1504/IJWGS.2008.022545>

Impact factor: 7.135, CiteScore Scopus: 7.8

48. V. Spiliopoulos, K. Kotis, G. A. Vouros, "Semantic retrieval and ranking of SW documents using free-form queries," Int. J. Metadata, Semantics and Ontologies, vol. 3, no. 2, pp. 95-108, 2008, <https://doi.org/10.1504/IJMSO.2008.021888>

Impact factor: N/A, CiteScore Scopus: 1

49. K. Kotis, G. A. Vouros, K. Stergiou, "Towards Automatic Merging of Domain Ontologies: The HCONE-merge approach," Journal of Web Semantics (JWS), Elsevier, vol. 4, no. 1, pp. 60-79, 2006 (Published Online First: 19 Okt. 2005) <https://doi.org/10.1016/j.websem.2005.09.004>

Impact factor: 1.897, CiteScore Scopus: 6.9

50. K. Kotis and G. A. Vouros, "Human-Centered Ontology Engineering: the HCOME Methodology," International Journal of Knowledge and Information Systems (KAIS), vol. 10, no. 1, pp. 109-131, 2006 (Published Online First: 9 Sept. 2005), <https://doi.org/10.1007/s10115-005-0227-4>

Impact factor: 3.161, CiteScore Scopus: N/A

51. G. A. Vouros, E. Eumeridou, P. Tselios, K. Kotis, "Multilingual, Ontology-driven, Content-based Search and Retrieval of Information Items," Journal of

Impact factor: 1.606, CiteScore Scopus: 2.8

## 6.2 In Books

1. K. Kotis and A. Papasalouros, "Automated Learning of Social Ontologies," *Ontology Learning and Knowledge Discovery Using the Web: Challenges and Recent Advances*, Wilson Wong; Wei Liu; Mohammed Bennamoun: IGI-Global, pp. 227-246 pp., 2011
2. K. Kotis and A. Papasalouros, "Learning of Social Ontologies in WWW: Key Issues, Experiences, Lessons Learned, and Future Directions," *Applied Semantic Technologies: Using Semantics in Intelligent Information Processing*, Vijayan Sugumaran and Jon Atle Gulla: Taylor & Francis, 2010
3. K. Kotis and G. A. Vouros, "Ontological tools: Requirements, Design Issues and Perspectives," *Theory and Applications of Ontology (TAO)*, vol. Volume 2: Computer Applications: Springer, 2010
4. G. A. Vouros, A. Papasalouros, K. Kotis, A. Valarakos, K. Tzonas, S. Retalis, and R. Krishnaswamy, "Semantic discovery of resources and services in democratized grids," *Handbook of Research on Social Dimensions of Semantic Technologies and Web Services*, M. Manuela Cunha, Eva Oliveira, Antonio Tavares & Luis Ferreira (Eds.), Information Science Reference, ISBN: 978-1-60566-650-1, 2009
5. K. Kotis, "Semantic Web Search: perspectives and key technologies," *Encyclopaedia of Data Warehousing and Mining*, 2nd Edition. John Wang (Ed.) Idea Group, 2008
6. K. Kotis and G. A. Vouros, "Semantic Integration and Interoperability among Portals," *Encyclopaedia of Portal Technology and Applications*. Arthur Tatnall (Ed.) Hershey, PA: Idea Group, 2007

## 6.3 In Conferences

1. Doumanas, D., Soularidis, A., Kotis, K., Vouros, G. (2024). Integrating LLMs in the Engineering of a SAR Ontology. In: Maglogiannis, I., Iliadis, L., Macintyre, J., Avlonitis, M., Papaleonidas, A. (eds) *Artificial Intelligence Applications and Innovations. AIAI 2024. IFIP Advances in Information and Communication Technology*, vol 714. Springer, Cham. [https://doi.org/10.1007/978-3-031-63223-5\\_27](https://doi.org/10.1007/978-3-031-63223-5_27)
2. S. Bentos *et al.*, "Evaluation of Fairness in Machine Learning-Based Recidivism Predictions: the Case of Greek Female Prison System," *2024 4th International Conference on Innovative Research in Applied Science, Engineering and Technology (IRASET)*, FEZ, Morocco, 2024, pp. 1-8, doi: 10.1109/IRASET60544.2024.10548202.
3. Bouchouras, Georgios, et al. "LLMs for the Engineering of a Parkinson Disease Monitoring and Alerting Ontology." GeNeSy'24: First International Workshop on Generative Neuro-Symbolic Artificial Intelligence, co-located with ESWC 2024, May 26, 2024, Hersonissos, Crete, Greece. <https://ceur-ws.org/Vol-3749/genesy-02.pdf>
4. Litaina, Tania, et al. "Towards LLM-based Semantic Analysis of Historical Legal Documents." SemDH2024: First International Workshop of Semantic Digital Humanities, co-located with ESWC2024, May 26 27, 2024, Hersonissos, Greece. <https://ceur-ws.org/Vol-3724/short2.pdf>
5. E. Moraitou, Y. Christodoulou, K. Kotis, G. Caridakis, An ontology to support decision-making in conservation and restoration interventions of cultural heritage, SWODCH'23: International Workshop on Semantic Web and Ontology Design for Cultural Heritage, November 7, 2023, Athens, Greece.

6. N. Zafeiropoulos, P. Bitilis, K. Kotis, "Wear4PDmove: an ontology for knowledge-based personalized health monitoring of PD patients", The 22nd International Semantic Web Conference (ISWC), Athens, Nov. 2023.
7. P. Bitilis, N. Zafeiropoulos, A. Koletis, K. Kotis, "Uncovering the semantics of PD patients' movement data collected via off the shelf wearables" The 14th International Conference on Information, Intelligence, Systems and Applications (IISA), Volos, July 2023.
8. S. Bentos , S. Spirou, K. Kotis, G. Tsekouras (2023) "Bias Assessment in AI-Based Predictions of Recidivism", 13th Beyond Humanism Conference (BHC), Mytilene.
9. Karakikes et al., (2023), "Understanding bias in Twitter-based intelligence analysis", 14th International Conference on Information, Intelligence, Systems and Applications (IISA 2023), Volos, July 2023.
10. Karakikes et al., (2023), "Towards Handling Bias in Intelligence Analysis with Twitter", 10th IEEE International Conference on Data Science and Advanced Analytics (DSAA), Thessaloniki, Okt. 2023.
11. Tzouvaras, C. et al. (2023). Semantic Interoperability for Managing Energy-Efficiency and IEQ: A Short Review. In: Maglogiannis, I., Iliadis, L., Papaleonidas, A., Chochliouros, I. (eds) Artificial Intelligence Applications and Innovations. AIAI 2023 IFIP WG 12.5 International Workshops. AIAI 2023. IFIP Advances in Information and Communication Technology, vol 677. Springer, Cham. [https://doi.org/10.1007/978-3-031-34171-7\\_19](https://doi.org/10.1007/978-3-031-34171-7_19)
12. Stergiou, G., Kavakli, E., Kotis, K., "Towards A Technology Acceptance Methodology For Industry 4.0", International Conference on ENTERprise Information Systems (CENTERIS), Lisbon, 11/2022.
13. Eleftheriou, O., A. Dimara, K. Kotis, and C. - N. Anagnostopoulos, "Saving Energy with Comfort: A Semantic Digital Twin approach for Smart Buildings", Third International Workshop on Semantic Digital Twins (SeDiT 2022), co-located with the 19th European Semantic Web Conference (ESWC 2022), Crete, 05/2022.
14. Soulardis, A., and K. Kotis, "Semantic modeling and reconstruction of drones' trajectories", 19th European Semantic Web Conference (ESWC 2022), Crete, 05/2022.
15. Moraitou, E., S. Angelis, K. Kotis, G. Caridakis, E. E. Papadopoulou, and N. Soulakellis, "Towards Engineering Drones' Semantic Trajectories as Knowledge Graphs", 5th International Workshop on Geospatial Linked Data (GeoLD 2022), co-located with the 19th European Semantic Web Conference (ESWC 2022), Crete, 05/2022.
16. Stavrinos, S., K. Kotis, and C. Kalloniatis, "Towards Semantic Modeling and Simulation of Cybersecurity on the Internet of Underwater Things", 18th International Conference on Artificial Intelligence Applications and Innovations (AIAI 2022), Crete, 05/2022.
17. Paparidis E. and Kotis K. (2021) Towards Engineering Fair Ontologies: Unbiasing a Surveillance Ontology, 2021 IEEE International Conference on Progress in Informatics and Computing (PIC), 2021, pp. 226-231, doi: 10.1109/PIC53636.2021.9687030.
18. Dimara A., Anagnostopoulos CN., Kotis K., Krinidis S., Tzovaras D. (2021) BEMS in the Era of Internet of Energy: A Review. In: Maglogiannis I., Macintyre J., Iliadis L. (eds) Artificial Intelligence Applications and Innovations. AIAI 2021. IFIP Advances in Information and Communication Technology, vol 627. Springer, Cham. [https://doi.org/10.1007/978-3-030-79150-6\\_37](https://doi.org/10.1007/978-3-030-79150-6_37).
19. Zachila K., Kotis K., Dimara A., Ladikou S., Anagnostopoulos CN. (2021) Semantic Modeling of Trustworthy IoT Entities in Energy-Efficient Cultural Spaces. In: Maglogiannis I., Macintyre J., Iliadis L. (eds) Artificial Intelligence Applications and Innovations. AIAI 2021 IFIP WG 12.5 International Workshops. AIAI 2021. IFIP Advances in Information and Communication

- Technology, vol 628. Springer, Cham. [https://doi.org/10.1007/978-3-030-79157-5\\_30](https://doi.org/10.1007/978-3-030-79157-5_30).
20. Angelis S., Kotis K. (2021) Generating and Exploiting Semantically Enriched, Integrated, Linked and Open Museum Data. In: Garoufallou E., Ovalle-Perandones MA. (eds) Metadata and Semantic Research. MTSR 2020. Communications in Computer and Information Science, vol 1355. Springer, Cham. [https://doi.org/10.1007/978-3-030-71903-6\\_34](https://doi.org/10.1007/978-3-030-71903-6_34).
  21. D. Spiliotopoulos, K. Kotis, C. Vassilakis, D. Margaris (2020), Semantics-Driven Conversational Interfaces for Museum Chatbots. In: Rauterberg M. (eds) Culture and Computing. HCII 2020. Lecture Notes in Computer Science, vol 12215. Springer, Cham. [https://doi.org/10.1007/978-3-030-50267-6\\_20](https://doi.org/10.1007/978-3-030-50267-6_20).
  22. S. Varitimiadis, K. Kotis, D. Spiliotopoulos, C. Vassilakis, D. Margaris (2020), "Talking" Triples to Museum Chatbots. In: Rauterberg M. (eds) Culture and Computing. HCII 2020. Lecture Notes in Computer Science, vol 12215. Springer, Cham. [https://doi.org/10.1007/978-3-030-50267-6\\_22](https://doi.org/10.1007/978-3-030-50267-6_22).
  23. S. Varitimiadis, K. Kotis, A. Skamagis, A. Tzortzakakis, G. Tsekouras, D. Spiliotopoulos, "Towards implementing an AI chatbot platform for museums", International Conference on Cultural Informatics, Communication & Media Studies, C. Kalloniatis, C-N. Anagnostopoulos, D. Papageorgiou, A. Kitsiou, M. Sideri (eds), eProceedings, Vol 1., No. 1, National Documentation Center, ISSN: 2654-1866, 2020. DOI: <http://dx.doi.org/10.12681/cicms.2732>
  24. A. Pliatsios, C. Goumopoulos, and K. Kotis, "Interoperability in IoT: A vital key factor to create the "Social Network" of Things", Thirteenth International Conference on Mobile Ubiquitous Computing, Systems, Services and Technologies, UBICOMM 2019, Porto, IARA, 09/2019. (Best Paper Award)
  25. K. Kotis, "Automating the Semantic Labeling of Stream Data", Thirteenth International Conference on Mobile Ubiquitous Computing, Systems, Services and Technologies (UBICOMM 2019), Porto, IARA, 09/2019.
  26. D. Spiliotopoulos, D. Margaris, C. Vassilakis, V. Petukhova and K. Kotis, "A Mixed-reality Interaction-driven Game-based Learning Framework", The 11th International Conference on Management of Digital EcoSystems (MEDES'19), Cyprus, ACM Digital Library, 11/2019.
  27. D. Spiliotopoulos, C. Vassilakis, D. Margaris, and K. Kotis, "A Methodology for Generated Text Annotation for High Quality Speech Synthesis", 10th International Conference on Information, Intelligence, Systems and Applications (IISA2019), Rion-Patra, 07/2019.
  28. K. Kotis, and G. A. Vouros, "Trust Semantics in IoT Entities' Deployment," in Proc. Workshop on Artificial Intelligence and Internet of Things (AI-IoT), 9th Hellenic Conference on Artificial Intelligence (SETN 2016), 05/2016.
  29. G. Santipantakis, K. Kotis, and G. A. Vouros, "Accessing and Reasoning with Data from Disparate Data Sources Using Modular Ontologies and OBDA," in Proc. SEMANTiCS, 2015.
  30. G. Santipantakis, K. Kotis, and G. A. Vouros, "Ontology-Based Data Integration for Event Recognition in the Maritime Domain", in Proc. The 5th International Conference on Web Intelligence, Mining and Semantics (WIMS'15): ACM, 2015.
  31. G. Santipantakis, K. Kotis, and G. A. Vouros, "Ontology-based Data Sources' Integration for Maritime Event Recognition," in Proc. 1st Workshop on Modeling, Computing and Data Handling for Marine Transportation (MCDMT 2015), The 6th International Conference on Information, Intelligence, Systems and Applications (IISA2015), Corfu, Greece, 2015
  32. K. Kotis, A. Katasonov, and J. Leino, "ASE results for OAEI 2012," in Proc. Seventh International Workshop on Ontology Matching, ISWC 2012, Boston, CEUR-WS, 11/2012.
  33. K. Kotis, A. Katasonov, and J. Leino, "AUTOMSv2 results for OAEI 2012," in Proc. Seventh International Workshop on Ontology Matching, ISWC 2012, Boston, CEUR-WS, 11/2012

34. K. Kotis, A. Katasonov, and J. Leino, "Aligning Smart and Control Entities in IoT," in Proc. 12th International Conference, NEW2AN 2012 and 5th Conference on Internet of Things and Smart Spaces, ruSMART 2012, LNCS 7469, Springer, pp. 39-50, St. Petersburg, 2012
35. K. Kotis & A. Katasonov, "Semantic Interoperability in the Web of Things: The Smart Gateway Framework," in Proc. 5th International Workshop on Frontiers in Complex, Intelligent and Software Intensive Systems, CISIS 2012, Palermo, Italy, 2012
36. K. Zoumpatianos, A. Papasalouros, and K. Kotis, "Semantic Web Rules for Automated Assessment in Intelligent Tutoring Systems," in Proc. The 24th Florida Artificial Intelligence Research Society Conference (FLAIRS-24), Special Track on Ontologies and Social Semantic Web for Intelligent Educational Systems (SWEL), Florida, USA, 2011
37. K. Kotis, P. Alexopoulos, and A. Papasalouros "Towards a Framework for Trusting the Automated Learning of Social ontologies," in Proc. Knowledge Science, Engineering and Management (KSEM), Belfast, 2010
38. G. Anadiotis, P. Alexopoulos, K. Mpasis, A. Zosakis, K. Kafentzis, and K. Kotis, "Facilitating Dialogue - Using Semantic Web Technology for eParticipation," in Proc. Extended Semantic Web Conference (ESWC), Crete, 2010
39. K. Kotis, A. Papasalouros, "Learning useful kick-off ontologies from Query Logs," in Proc. 4th international conference CISIS, Krakow, 2010
40. K. Kotis, A. Papasalouros, M. Maragoudakis, "Mining Web queries to boost semantic content creation," in Proc. IADIS conference WWW/Internet, Rome 2009
41. K. Kotis, A. Papasalouros, G. A. Vouros, et al, "e-Class in Ontology Engineering: integrating Ontologies to Argumentation and Semantic Wiki technology," in Proc. Workshop on Intelligent and Innovative Support for Collaborative Learning Activities (WIISCOLA), 8th International Conference on Computer Supported Collaborative Learning, Rhodes, 2009
42. K. Kotis, A. Papasalouros, N. Nikitakos, "Supporting Decision Making in Maritime Environmental Protection with a Knowledge-based Education and Awareness Approach," in Proc. Artificial Intelligence Applications in Environmental Protection Workshop, collocated with 5th IFIP Conference on Artificial Intelligence Applications and Innovations (AIAI) 23-25 April, Thessaloniki, Greece, 2009
43. G. A. Vouros, A. Valarakos, and K. Kotis, "Uncovering WSDL Specifications' Data Semantics," in Proc. 2nd International Workshop on Service Matchmaking and Resource Retrieval (SMR2), International Semantic Web Conference (ISWC 2008), Germany, 2008
44. G. A. Vouros, F. Dimitrokalis, and K. Kotis, "Look Ma, No Hands: Supporting the semantic discovery of services without ontologies," in Proc. 2nd International Workshop on Service Matchmaking and Resource Retrieval (SMR2), International Semantic Web Conference (ISWC 2008), Germany, 2008
45. K. Kotis, "On Supporting HCOME-3O Ontology Argumentation using Semantic Wiki Technology," in Proc. OTM 2008 Workshops, Springer-Verlag Berlin Heidelberg, LNCS 5333, pp. 193–199, 2008
46. A. Papasalouros, K. Kotis, K. Kanaris, "Automatic generation of multiple-choice questions from domain ontologies," in Proc. IADIS e-Learning 2008 (eL 2008) conference, Amsterdam, 2008
47. K. Kotis and Monika Lanzenberger, "Ontology Matching: current status, dilemmas and future challenges," in Proc. Ontology Alignment and Visualization Workshop (OnAV08), CISIS 2008 Conference, IEEE Computer Society, 2008
48. K. Kotis, G. A. Vouros, A. Valarakos, A. Papasalouros, K. Tzonas, X. Vilajosana, R. Krishnaswamy, N. Amara-Hachmi, "The Grid4All ontology for the retrieval of traded resources in a market-oriented Grid," in Proc. Web/Grid

- Information and Services Discovery Workshop, CISIS 2008 Conference, IEEE Computer Society, 2008
49. G. A. Vouros, K. Kotis, C. Chalkiopoulos, N. Lelli, "The HCOME-3O Framework for Supporting the Collaborative Engineering of Evolving Ontologies," in Proc. ESOE 2007 International Workshop on Emergent Semantics and Ontology Evolution, International Semantic Web Conference (ISWC 2007), November 12th, Busan, Korea, 2007
  50. A. Valarakos, V. Spiliopoulos, K. Kotis, G. Vouros, "AUTOMS-F: A Java Framework for Synthesizing Ontology Mapping Methods," in Proc. I-KNOW 2007 Conference, Special Track on Knowledge Organization and Semantic Technologies 2007 (KOST '07), Graz, September 2007
  51. K. Kotis, A. Valarakos, G. Vouros, "AUTOMS: Automating Ontology Mapping through Synthesis of Methods," in Proc. OAEI (Ontology Alignment Evaluation Initiative) 2006 contest, Ontology Matching International Workshop, International Semantic Web Conference (ISWC'06), Atlanta USA. Also in CEUR-WS.org/Vol. 225, ISSN 1613-0073, 2006
  52. K. Kotis, G. Vouros, "Towards Semantic Web Documents Retrieval through Ontology Mapping: Preliminary Results," in Proc. 1st Asian Semantic Web Conference (ASWC 2006), Workshop on Web Search Technology - from Search to Semantic Search, Beijing, 2006
  53. K. Kotis, "Using simple ontologies to build personal Webs of knowledge," in Proc. 25th International Conference of the British Computer Society, SGAI, Cambridge, 2005
  54. G. Vouros and K. Kotis, "Extending HCONE-merge by approximating the intended interpretations of concepts iteratively," in Proc. 2nd European Semantic Web Conference, Heraklion, Crete May 29 – June 2005
  55. K. Kotis, G. A. Vouros, Jerónimo Padilla Alonso, "HCOME: tool-supported methodology for collaboratively devising living ontologies," in Proc. 2nd International Workshop in Semantic Web and Databases Workshop (SWDB), VLDB'04, Toronto Canada, August 29-30, 2004.
  56. K. Kotis, G. Vouros, K. Stergiou, "Capturing Semantics towards Automatic Coordination of Domain Ontologies," in Proc. Artificial Intelligence: Methodology, Systems, and Applications, 11th International Conference, AIMA 2004, Varna, Bulgaria, September 2-4, 2004
  57. K. Kotis, G. Vouros, "HCONE approach to Ontology Merging," in Proc. The Semantic Web: Research and Applications, First European Semantic Web Symposium, ESWS'04, Heraklion, Crete, Greece, May 10-12, 2004
  58. K. Kotis, G. Vouros, "Human Centered Ontology Management with HCONE," in Proc. Ontologies and Distributed Systems Workshop (ODS'03) in IJCAI'03 conference, Acapulco, 2003
  59. G. Vouros, K. Kotis, P. Tselios, "Retrieval and Exploration of Terminological Knowledge over the World Wide Web," in Proc. Computational Lexicography and Multimedia Dictionaries (COMLEX), Achaia, Greece, in 2000

#### **6.4 Research monographs (from the list of publications)**

1. Kotis, K. (2021). D-h-index: a linked data quality metric. *Academia Letters*, Article 2903.<https://doi.org/10.20935/AL2903>
2. Kotis, K. (2021). Artificial General Intelligence and Creative Economy. *Academia Letters*, <https://doi.org/10.20935/AL260>.
3. Kotis, K., ARTIST - A real-time low-effort multi-entity Interaction System for creating reusable and optimized MR experiences, *Research Ideas and Outcomes*, 5: e36128, 2019, <https://doi.org/10.3897/rio.5.e36128>
4. Kotis, K., Automating the Semantic Labeling of Stream Data, Thirteenth International Conference on Mobile Ubiquitous Computing, Systems, Services and Technologies (UBICOMM 2019), Porto, IARA, 09/2019

5. Kotis, K., On Supporting HCOME-3O Ontology Argumentation using Semantic Wiki Technology, in Proc. OTM 2008 Workshops, Springer-Verlag Berlin Heidelberg, LNCS 5333, pp. 193–199, 2008
6. Kotis, K., Using simple ontologies to build personal Webs of knowledge, in Proc. 25th International Conference of the British Computer Society, SGAI, Cambridge, 2005

## **6.5 Other publications**

1. Paparidis E. and Kotis K., Knowledge Graphs and Machine Learning in biased C4I applications, arXiv:2106.09258, 2021.
2. Sikelis K., Tsekouras G., Kotis K. Ontology-based Feature Selection: A Survey, arXiv: 2104.07720, 2021
3. Chondrogianni Maria, Marini Efstatia, Angelis Sotiris, & Kotis Konstantinos. (2021). Greek Children Art Museum dataset (Version 1) [Data set]. Zenodo. <http://doi.org/10.5281/zenodo.4425440>.
4. ENISA: Kalloniatis Christos (University of the Aegean), Costas Lambrinoudakis (University of Piraeus), Konstantinos Kotis (University of Piraeus), Prokopios Drogkaris (ENISA), Towards a framework for policy development in cybersecurity, March 14, 2019, ISBN 978-92-9204-282-0, DOI 10.2824/453043.
5. Kotis, K., I. Athanasakis, and G. A. Vouros, Semantic Integration & Single-Site Opening of Multiple Governmental Data Sources, : arXiv:1407.0481, 2014.

## **6.6 Books**

1. **Semantic Web Technology and Recommender Systems**, Konstantinos Kotis and Dimitris Spiliopoulos, Eds. ISBN 978-3-0365-7210-9 (hardback); ISBN 978-3-0365-7211-6 (PDF), <https://doi.org/10.3390/books978-3-0365-7211-6>, URL: <https://www.mdpi.com/books/book/7191>
2. **Semantic Web for the Working Ontologist**, G.A Vouros, K. Kotis, G. Santipantakis. <https://www.disigma.gr/simasiologikos-istos.html> Greek version of the book “[Semantic Web for the Working Ontologist: Effective Modeling in RDFS and OWL](#)”, by Dean Allemang, James Hendler.
3. **Αναδυόμενες και Ανατρεπτικές Τεχνολογίες σε Πολιτιστικούς Χώρους**, Κώτης Κ., Αγγειούρα Ε., Λύγγηρη Ε. 2024, ISBN13 978-618-202-200-9 <https://disigma.gr/products/anadyomenes-kai-anatreptikes-texnologies/>