

K A T E R I N A P A S T R A

- Cognitive Systems Research Institute (CSRI)
7 Makedonomachou Prantouna Street, P.C. 11525, Athens, Greece
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Job Experience

- 2010 - ongoing **Director and Founder**
Cognitive Systems Research Institute (CSRI)
Athens, Greece
&
Senior Researcher
Institute for Language and Speech Processing (ILSP)
ATHENA Research Center
Athens, Greece
&
Visiting Associate Professor (Reader)
Centre for Robotics and Neural Systems (CNRS)
University of Plymouth
Plymouth, UK
- 2008 - 2010 **Senior Researcher**
2004 - 2007 **Research Fellow**
Institute for Language and Speech Processing (ILSP)
ATHENA Research Center
Athens, Greece
- 2002 - 2004 **Lecturer**
Human Computer Interaction and Graphical Interfaces
(COM2090/6450 -
2nd Year undergraduates and Master students)
Department of Computer Science, University of Sheffield, U.K.
- 2000 - 2004 **Research Associate**
Natural Language Processing Group
Department of Computer Science, University of Sheffield, U.K.
&
Research Co-ordinator
Institute for Language, Speech and Hearing (ILASH)
University of Sheffield, U.K.
- 1995 - 1999 **Tutor**

Private tutorials in *Ancient Greek, Modern Greek and English*,
to high-school students

Research Projects

- 2017-2020 **RoboCom++**
Rethinking robotics for the robot companion of the future
FLAG-ERA Joint Transnational Research
<https://www.flagera.eu/funded-projects/>
Duties:
- CSRI PI
- 2014-2018 **iV&L Network**
*The European Network on Integrating Vision and Language:
Combining Computer Vision and Language Processing For
Advanced Search, Retrieval, Annotation and Description of
Visual Data*
ESF-COST-Information & Communication Technologies, Grant
No: IC1307
http://www.cost.eu/domains_actions/ict/Actions/IC1307
Duties:
- Vice Chair of the Network
 - Leader of Work Group 1: Vision-Language Integration
Models
- 2013-2015 **GEOTHNK**
Semantic pathways for building a spatially-thinking society
Funded by the European Commission, Lifelong Learning
Programme, KA3 Multilateral projects, The Education,
Audiovisual and Culture Executive Agency (EACEA), Grant No:
543451
<http://www.geothnk.eu/index.php/en/>
Duties:
- External Senior Research Collaborator for the National
Technical University of Athens, School of Rural and
Surveying Engineering, Ontological Research in
Geographic Information Science Group
- 2013-2015 **COGNIMUSE**
*Cognitive Perspectives of Multimodal Signal and Event
Processing*
Funded by the Greek Secretariate of Research & Technology
and the European Commission (ARISTEIA I call)
<http://cvsp.cs.ntua.gr/research/cognimuse/>
Duties:
- External Senior Research Collaborator for the National
Technical University of Athens, School of Electrical and

Computer Engineering, Computer Vision and Pattern Recognition Group

- 2012-2015 **POETICON++**
Robots Need Language: A computational mechanism for generalisation and generation of new behaviours in robots
Funded by the EC-FP7-ICT-Call 7, Grant No: 288382
<http://www.poeticon.eu>
Duties:
- Scientific Co-ordinator of the project - Coordinator of a consortium comprising: CSRI & ILSP (GR), Italian Institute of Technology (IT), Istituto Superior Tecnico (PT), University of Plymouth (UK), University of Maryland (USA)
 - CSRI and ILSP Principal Investigator
- 2008-2011 **POETICON**
The "Poetics of Everyday Life": Grounding Resources and Mechanisms for Artificial Agents
Funded by the EC-FP7-ICT-2007-1, Grant No: 215843
<http://www.csri.gr/Poeticon>
Duties:
- Administrative and Scientific Co-ordinator of the project - Coordinator of a consortium comprising: ILSP (GR), Italian Institute of Technology (IT), University of Maryland (USA), University of Ljubljana (SI) and Max Planck Institute (DE)
 - ILSP Principal Investigator
- 2009 - 2010 **Latsis Research Study**
Image-Language Dialectics in Greek Caricatures
Funded by Latsis Foundation
<http://www.cosmoroe.eu>
Duties: Principal Investigator
- 2004 - 2007 **REVEAL THIS**
Retrieval of Video And Language for The Home user in an Information Society - Funded by the EC-FP6-IST
<http://sifnos.ilsp.gr/RevealThis>
Duties: Project management & research for the project coordinator (ILSP)
- 2000 - 2003 **SOCIS**
Scene Of Crime Information System
Funded by EPSRC, in collaboration with the University of Surrey
<http://www.dcs.shef.ac.uk/nlp/socis>
Duties: Main Researcher of the Sheffield project team.
- 2000 **CONCERTO**

CONCEptual indexing, querying and ReTrieval Of digital documents, Funded by the EU - ESPRIT

<http://concerto.pira.co.uk/>

Duties: Creation of the rules for the Named Entity Recognition task as member of the UMIST project team.

Research Grants acquired

- **Robocom++**, Three year Research Project funded by FLAG-ERA - CSRI PI - EC Grant: **2,825,012 Euros**, Total Budget: **4,216,718 Euros**
- **iV&L Network**, Four year Research Networking Project funded by the European Science Foundation/COST, ICT section - Vice Chair - EC Grant: **680,000 Euros** (approx. - Yearly budget of approx. 170.000 revisited every year depending on activities)
- **GEOTHNK**, Two year LLP Project funded by EACEA - EC Grant: **399,824 Euros**, Total Budget: **533,099 Euros**
- **COGNIMUSE**, Three year Project funded by GSRT/ESPA - GSRT Grant: **495,000 Euros**
- **POETICON++**, Four year STREP Research and Development Project funded by the European Commission, FP7-ICT-Call 7, Cognitive Systems, Interaction, Robotics (January 2011) - Co-ordinator and Principal Investigator - EC Grant: **3,880,000 Euros** (8% acceptance rate), Total Budget: **5,120,799.53 Euros**.
- **POETICON**, Three year STREP Research and Development Project funded by the European Commission, FP7-ICT-2007-1, Cognitive Systems, Interaction, Robotics (May 2007) - Co-ordinator and Principal Investigator - EC Grant: **3,250,000 Euros** (8.6% acceptance rate), Total Budget: **4,273,544.71 Euros**.
- **Latsis Research Study**, one year research study awarded by the John Latsis Foundation - 2009 - Principal Investigator - Grant: **12,000 Euros** (2% acceptance rate)
- **Citizenshield/POLIAS**, Two year Research Project funded by the Greek General Secretariat for Research and Technology - Sound, Image, Language Call (October 2005) - Main author - Grant: **534,595 Euros**

Teaching / Supervision:

- Visiting PhD/PostDoc Student Supervisor

Lorenzo Gregori (February - April 2017), "*Large Scale Knowledge Bases of Integrated Vision and Language Representations*", University of Florence, Italy, CSRI visiting PostDoc student.

Nicolas Vitucci (May - July 2012), "*Embodied Ontologies for the Semantic Web*", Politecnico di Milano, CSRI visiting PhD student.

- PhD Thesis Examiner

Marios Daoutis (2013), "Knowledge Based Perceptual Anchoring: Grounding percepts to concepts in cognitive robots", Orebro University, Sweden

- **MSc Thesis External Examiner**

- o Myriam Mencke, (2007), "Benchmarking a Text Classification Technique" *The University of Dublin Trinity College*, Dep. Computer Science

- **MSc Thesis Supervisor**

- o Maria Lada and Evi Badavanou, (2008), "*Exploration of logical entailment in Multimedia Data*" (in Greek), MSc in Language Technologies offered in conjunction by the *University of Athens*-department of Linguistics, National Technical University of Athens-School of Computer Engineering and the Institute of Language and Speech Processing (co-supervision with S. Piperidis)

- **Human-Computer Interaction and Graphical Interfaces** (2002-2004), Lectures, Dep. Computer Science, *University of Sheffield*

Education

- 2001 - 2005 **University of Sheffield, U.K.**
Ph.D. in Artificial Intelligence
Thesis:
"Vision - Language Integration: a Double-Grounding Case"
Supervisor: Prof. Yorick Wilks
- 1999 - 2000 **University of Manchester Institute of Science & Technology, U.K.**
MSc in Machine Translation
Dissertation Thesis:
"Basic Semantic Element Extraction: The rule-writing experience"
Supervisor: John McNaught
Thesis: 'A'. Average score in taught courses' examination: 'B+'
- 1995 -1999 **National and Kapodistrian University of Athens, Greece**
BA in Greek Philology and Linguistics
Final year project:
"The language of caricature: Language and drawing interaction"
Supervisor: Prof. George Babiniotis
First Class degree: 8.43
- 1996 - 1997 **"DIDACTA" Educational Institution (Athens, Greece)**
Certificate of Secretarial Studies
The Courses included:
Typewriting, Shorthand, Information Technology, Accounting,

Introduction to Economics, Organisational Behaviour

1992 - 1995 **2nd Lyceum of Neo Psychiko, Athens, Greece**
 Graduated with Excellent: 19.2

1989 - 1992 **2nd High School of Neo Psychiko, Athens, Greece**
 Graduated with Excellent: 19.8

Languages

Greek: Native
 English: Fluently
 Certificate of Proficiency in English, Cambridge University,
 1994
 French: Fluently
 Sorbonne 2 - Option: Literature, University of Sorbonne, 1999
 German: Advanced
 Level equivalent to 'Kleines Diplom' - Goethe Institute, 1999
 Spanish: Elementary
 Ancient Greek &
 Latin: Reading and Writing Knowledge

Computer Skills

Platforms: DOS, Windows, UNIX, LINUX
 Programming: ProLog, LISP, Perl, Java, shell-programming
 Web-related: HTML, XML, VRML
 Video-editing &
 movie creation: Adobe Premiere, Sony Vegas, Pure Motion - EditStudio,
 Camtasia
 Miscellaneous: EMACS, LATEX

Studentships - Awards

2011 Google Inc.
 Funding for the AAAI 2011 workshop on "Language and
 Action Tools for Artificial Agents".
 2011 EUCognition Network
 Funding for the AAAI 2011 workshop on "Language and
 Action Tools for Artificial Agents".
 2010 Maria Laimou Foundation
 Grant for post-doctoral research

- 2006 NATO
Grant covering fees and accommodation/subsistence cost for participating in the NATO Advanced Study Institute on “*The Fundamentals of Verbal and Non-verbal Communication and the Biometrical Issue*” Vietri sul Mare, Italy (2-12 September)
- 2006 Aim@Shape Network of Excellence
Grant covering fees, accomodation and subsistence cost for participating in the Aim@Shape summer school on the “Application of 3D Shapes: Ontologies, Software Tools and Industrial Case Studies”, Tallinn, Esthonia (19-25 July 2006)
- 2006 DELOS and MUSCLE Networks of Excellence
Grant covering the fees for participating in the Joint DELOS-MUSCLE summer school on Multimedia Digital Libraries, Machine Learning and cross-modal technologies for access and retrieval, San Vincenzo, Italy (12-17 June 2006)
- 2003 European Network in Human Language Technologies
Funding and travel grants for organising the EACL workshop on the Evaluation of Natural Language Processing Technologies
- 2002 **Paper Award** – British Computer Society Special Interest Group in Artificial Intelligence Conference (cf. publications section)
- 2002 European Union - IHP
Grant covering the whole cost of attending the 10th ELSNET Summer School (on the Evaluation and Assessment of Text and Speech Systems), in Odense, Denmark (15 - 26 July 2002).
- 2001 European Union - IHP
Grant covering the whole cost of attending the 9th ELSNET Summer School (on Text and Speech Corpora), in Prague, Czech Republic (16 - 27 July 2001).
- 1995 - 1999 University of Athens - Department of Bursaries and Awards
Bursary covering the whole duration of undergraduate studies.
- 1995 - 1999 Greek Merchant Marine - Department of Awards
Annual monetary awards for excellence in higher education.
- 1989 - 1995 Awards for excellence, every year of High School and Lyceum studies.

Publications

Theses

Katerina Pastra (2005), "*Vision-Language Integration: a Double-Grounding Case*", PhD Thesis, Department of Computer Science, University of Sheffield, U.K.

Katerina Pastra (2000), "*Basic Semantic Element Extraction: the rule-writing experience*", Msc Dissertation, UMIST, U.K.

Books / Monographs / Columns

Katerina Pastra (2014), "*Beware of the Label*", Editorial, IEEE Computational Intelligence Society, Newsletter on Autonomous Mental Development, vol. 11, number 1, ISSN 1550-1914.

Katerina Pastra (2013), "*Autonomous Acquisition of Sensorimotor Experiences: Any Role for Language?*", Editorial, IEEE Computational Intelligence Society, Newsletter on Autonomous Mental Development, vol. 10, number 2, ISSN 1550-1914.

Katerina Pastra and Yiannis Aloimonos (2011)(eds.), Technical Report of the AAAI 2011 Workshop on "Language-Action Tools for Cognitive Artificial Agents: Integrating Vision, Action and Language", Technical Report [WS-11-14](#).

Katerina Pastra, E. Balta, P. Dimitrakis, E. Bandavanou and M. Lada (2009), "*Image-Language Dialectics in Greek Caricatures*", I. Latsis Foundation, Research Studies 2009: <http://www.latsis-foundation.org/files/Meletes2009/12.report.pdf> (monograph in Greek).

Gabriela Csurka and Katerina Pastra (2009)(eds.), Special Issue on *Metadata Mining for Image Understanding*, Multimedia Tools and Applications Journal, vol. 42, Springer Verlag, ISSN: 1380-7501.

Gabriela Csurka and Katerina Pastra (2008)(eds), Proceedings of the First International Workshop on: "*Metadata Mining for Image Understanding*", in Conjunction with the Computer Vision Theory and Applications Conference (VISAPP 2008), Insticc Press, ISBN: 978-989-8111-24-1.

Katerina Pastra (2003)(ed.), Proceedings of the European Association for Computational Linguistics 2003 - Workshop on: "*Evaluation initiatives in Natural Language Processing: are evaluation methods, metrics and resources reusable?*", Association for Computational Linguistics, ACL anthology: <http://www.aclweb.org/anthology-new/W/W03/#2800>

Journal Articles

Vatakis A., Pastra K. (2016), "A multimodal dataset of spontaneous speech and movement production on object affordances", Nature - Scientific Data 3, Article number: 150078.

Katerina Pastra and Yiannis Aloimonos (2012), "*The Minimalist Grammar of Action*", Philosophical Transactions of the Royal Society B, 367(1585):103.

Katerina Pastra (2010), *"From Lexicon to PRAXICON: language-action-image semantic relations"*, in K. Potagas and I. Evdokimidis (eds), *Conversations on Language and Action*, Aiginiteion Series, pp. 143-172, Synapseis Publishers, ISBN:9789606723117 (in Greek).

Katerina Pastra (2008), *"COSMOROE: A Cross-Media Relations Framework for Modelling Multimedia Dialectics"*, *Multimedia Systems Journal*, vol 14(5), pp. 299-323, Springer Verlag.

Katerina Pastra and Stelios Piperidis (2006), *"Video Search: New challenges in the Pervasive Digital Video Era"*, *Journal of Virtual Reality and Broadcasting*, volume 3, number 11.

Katerina Pastra, Horacio Saggion, Yorick Wilks (2003), *"Intelligent Indexing of Crime-Scene Photographs"*, *IEEE Intelligent Systems*, Special Issue on "Advances In Natural Language Processing", vol. 18 (1), pp. 55-61.

Katerina Pastra, Horacio Saggion and Yorick Wilks (2003), *"Extracting relational facts for indexing and retrieval of crime-scene photographs"*, in *Knowledge-Based Systems*, vol. 16 (5-6), pp. 313-320, Elsevier Science.

Conference Publications / Chapters in Collective Volumes

Kavouras M., Kokla M., Tomai E., Darra A. and Katerina Pastra (2016), *"GEOTHNK: A Semantic Approach to Spatial Thinking"*, in Gartner, G., Jobst, M. & Huang, H. (Eds.), *Progress in Cartography: EuroCarto 2015*, Springer International Publishing, pp. 319-338.

Vasiliki Efstathiou and Katerina Pastra (2015), *"Early language acquisition: an enactive cognition analysis on CDI understanding scores of infants aged 8-18 months"*, *Proceedings of the Workshop on Extensive and Intensive Recordings of Children's Language Environment (WEIRCLE)*, Paris, France.

Zlatintsi A., P. Koutras, N. Efthymiou, P. Maragos, A. Potamianos and K. Pastra (2015), *"Quality Evaluation of Computational Models for Movie Summarization"*, in *Proc. 7th Int'l. Workshop on Quality of Multimedia Experience (QoMEX-2015)*, Costa Navarino, Messinia, Greece, May 2015.

Paschalis Veskos and Katerina Pastra (2014), *"Perspectives of Robot Action Generalisation: Challenges and Achievements"*, *Proceedings of the International IEEE Workshop on Autonomous Cognitive Robotics*, Stirling, UK.

Argiro Vatakis, Katerina Pastra and Panagiotis Dimitrakis (2014), *"Acquisition of object knowledge through Exploratory Acts"*, *15th International Multisensory Research Forum (IMRF)*, 11-14 June, Amsterdam, NL.

Kavouras M., S. Sotiriou, A. Baglatzi, N. Darra, M. Kokla, A. Lazoudis, K. Pastra, and E. Tomai. (2014), *"Semantic Pathways For Geospatial Thinking"*, In *International Conference On Learning Innovations And Learning Quality (Linq)*.

Argiro Vatakis, Katerina Pastra and Panagiotis Dimitrakis (2012), *"Acquiring object affordances through touch, vision, and language"*, *13th International Multisensory Research Forum (IMRF)*, University of Oxford, UK.

- Katerina Pastra, E. Balta, P. Dimitrakis, G. Karakatsiotis (2011), "*Embodied Language Processing: a new generation of language technology*", in Proceedings of the AAAI 2011 International Workshop on "Language-Action Tools for Cognitive Artificial Agents: Integrating Vision, Action and Language", San Francisco, USA.
- Wallraven C., M. Schultze, B. Mohler, A. Vatakis and Katerina Pastra (2011). "*The POETICON enacted scenario corpus - a tool for human and computational experiments on action understanding*", in Proceedings of the 9th IEEE conference on Automatic Face and Gesture Recognition (FG'11).
- Argiro Vatakis, Katerina Pastra and Panagiotis Dimitrakis (2011), "*Uncovering the definition of an object and it's affordances through language*", 13th Hellenic Conference of Psychological Research, Athens, Greece (in Greek).
- Katerina Pastra, Dimitrakis P., Balta E. and Karakatsiotis G. (2010), "*PRAXICON and its language-related modules*", in Proceedings of Companion Volume of the 6th Hellenic Conference on Artificial Intelligence (SETN), pp. 27-32, Athens, Greece.
- Katerina Pastra, Wallraven C., Schultze M., Vatakis A. and Kaulard K. (2010), "*The POETICON corpus: Capturing language use and sensorimotor experience in everyday interaction*", in Proceedings of the 7th Language Resources and Evaluation Conference (LREC), Valletta, Malta.
- Katerina Pastra (2010), "*PRAXICON: a grounded, compositional & generative concept world*", in proceedings of the 4th International Conference in Cognitive Systems (CogSys), ETH, Zurich, Switzerland.
- Wallraven C., M.Schultze, B. Mohler, E. Volkova, I. Alexandrova, A. Vatakis, K. Pastra (2010), "*Understanding Objects and Actions - A VR Experiment*", Joint Virtual Reality Conference (JVRC'10).
- Katerina Pastra and Eirini Balta (2009), "*A Text-Based Search Interface for Multimedia Dialectics*", in Proceedings of the System Demonstration Session of the 12th Conference of the European Association for Computational Linguistics, pp. 53-56, Athens, Greece.
- Katerina Pastra (2009), "*Metonymy and Metaphor in Cross-Media Semantic Interplay: the COSMOROE framework and annotated corpus*", RaAM 2009 International Workshop on "Metaphor, Metonymy and Multimodality", University of Amsterdam, Amsterdam, Greece.
- Katerina Pastra (2008), "*PRAXICON: the development of a grounding resource*", in Proceedings of the 4th International Workshop on Human-Computer Conversation, Bellagio, Italy.
- Katerina Pastra (2006), "*An alternative suggestion for vision-language integration in intelligent agents*", in Proceedings of the 4th Hellenic Conference on Artificial Intelligence (SETN), Lecture notes in Artificial Intelligence, vol. 3955, pp. 588-591, Herakleion, Greece.

- Katerina Pastra and Stelios Piperidis (2006), "*Crossing media for video search: enabling usability beyond traditional broadcast and TV*", in Proceedings of the 4th European Interactive TV conference (EuroITV), Athens, Greece.
- Katerina Pastra (2006), "*Beyond multimedia integration: corpora and annotations for cross-media decision mechanisms*", in Proceedings of the 5th Language Resources and Evaluation Conference (LREC), pp. 499-504, Genoa, Italy.
- Katerina Pastra (2006), "*Image-Language association: are we looking at the right features?*", in Proceedings of the OntoImage International Workshop on "*Language resources for content-based image retrieval*", pp. 40-43, Genoa, Italy.
- Stelios Piperidis, Xaris Papageorgiou, Katerina Pastra & the REVEAL THIS consortium (2006), "*Multimedia Content Processing and Retrieval in the REVEAL THIS setting*", First International Conference on Semantic and Digital Media Technologies, Athens, Greece.
- Katerina Pastra (2004), "*Viewing Vision-Language Integration as a Double-Grounding Case*", in Proceedings of the American Association of Artificial Intelligence (AAAI) Fall Symposium on "*Achieving Human-Level Intelligence through Integrated Systems and Research*", pp. 62-67, Washington D.C. USA.
- Katerina Pastra and Yorick Wilks (2004), "*Vision-Language Integration in AI: a reality check*", in Proceedings of the 16th European Conference on Artificial Intelligence (ECAI), pp. 937-941, Valencia, Spain.
- Katerina Pastra and Yorick Wilks (2004), "*Image-Language Multimodal Corpora: needs, lacunae and an AI synergy for annotation*", in Proceedings of the 4th Conference on Language Resources and Evaluation (LREC), pp. 767-770, Lisbon, Portugal.
- Katerina Pastra, Horacio Saggion (2003), "*Colouring Summaries BLEU*", in Proceedings of the European Association of Computational Linguistics (EACL) Workshop on "*Evaluation initiatives in Natural Language Processing: are evaluation methods, metrics and resources reusable?*", pp. 32-39, Hungary, Budapest.
- Katerina Pastra, Horacio Saggion, Yorick Wilks (2003), "*NLP for indexing and retrieval of captioned photographs*", in Proceedings of the Conference of the European Association of Computational Linguistics (EACL) (Research Notes), pp. 143-146, Budapest, Hungary.
- Horacio Saggion, Katerina Pastra, Yorick Wilks (2003), "*Using Natural Language Processing for Semantic Indexing of Scene-of-Crime Photographs*", Lecture Notes in Computer Science, vol. 22588, pp. 526-536, Springer Verlag.
- Katerina Pastra, Horacio Saggion, Yorick Wilks (2002), "*Extracting relational facts for indexing and retrieval of crime-scene photographs*", in "*Applications and Innovations in Intelligent Systems X*", British Computer Society Conference Series, pp. 121-134, Springer Verlag. (Selected as one of the best papers of the Application Stream of the conference).

Katerina Pastra, Diana Maynard, Oana Hamza, Hamish Cunningham, Yorick Wilks (2002), "*How feasible is the reuse of grammars for Named Entity Recognition?*", Proceedings of the 3rd Conference on Language Resources and Evaluation (LREC), pp. 1412-1418, Canary Islands, Spain.

Katerina Pastra, Horacio Saggion (2001), "*The language at the scene of the crime -Analysing Crime-Scene reports*", in Proceedings of the 5th Biennial Meeting of the International Association of Forensic Linguistics, 30 June - 2 July 2001, Malta.

Technical Reports

Katerina Pastra (2015), "*COSMOROE Annotation Guide*", CSRI Technical Report Series, CSRI-TRS-150201, Cognitive Systems Research Institute, ISSN 2407-9952.

Katerina Pastra, Horacio Saggion and Yorick Wilks (2003), "*SOCIS: Scene of Crime Information System - EPSRC IGR Review*", Department of Computer Science, University of Sheffield.

Katerina Pastra, Horacio Saggion, Yorick Wilks (2001), "*SOCIS: Scene of Crime Information System*", Technical Report, DCS-19-01, Department of Computer Science, University of Sheffield.

Patents

- Aloimonos Y., Fermueller C., Yang Y., Li Y., Pastra K. (2014), "[Learning Manipulation Actions from Unconstrained Videos](#)", provisional patent application, No. 62/109134.

Invited Talks & Tutorials

- Katerina Pastra (01 November 2017), "Recursion all the way: in Language, Action and Semantic Association", Keynote speaker at the International Workshop on Artificial Intelligence and Cognition (AIC), Larnaka, Cyprus.
- Katerina Pastra (06 September 2017), "*Vision and Language Integration for Knowledge Representation*", Lecture at the 3rd Vision and Language Integration Summer School, Athens, Greece.
- Katerina Pastra (25 August 2017), "Recursion all the way: in Language, Action and Semantic Association", Keynote speaker at the International Workshop on Grounding Language Understanding, International Speech Communication Association (ISCA), Stockholm, Sweden.
- Katerina Pastra (27 May 2017), "Revisiting 'Ars Grammatica' or how to convince your child that learning grammar is useful", TedX Chalkida, Chalkida, Greece.
- Katerina Pastra (10 May 2017), "Recursion all the way: in Language, Action and Semantic Association", Demokritos Research Center, Athens, Greece.

- Katerina Pastra (06 June 2016), "Recursion all the way: in Language, Action and Semantic Association", Keynote speaker at the ModelAct Conference, Rome, Italy.
- Katerina Pastra (23 May 2016), "PRAXICON: a semantic network of recursive and multisensory conceptual structures for robots", National Technical University of Athens (NTUA), Athens, Greece.
- Katerina Pastra (03 February 2016), "Cross-media Semantic Relations in Multimedia Discourse - a cognitive perspective", iV&L network meeting, Rijeka, Croatia.
- Katerina Pastra (07 November 2015), "Semantics, Networks and Technology: When Learning Pathways incorporate Cognitive Concept Maps", GEOTHNK Conference, Athens, Greece.
- Katerina Pastra (12 March 2015), "Language and Vision Integration in the POETICON++ Project", iV&L network meeting, Heidelberg, Germany.
- Katerina Pastra (18 November 2014), "*Fundamental Mechanisms for Cognitive Robots: The POETICON Contribution*", Humanoids 2014 Workshop on Cognitive Robotics, Madrid, Spain.
- Katerina Pastra & Dimitris Mavroeidis (31 May 2014), "*When Semantic Language Resources meet Cognitive Systems*", Tutorial at the 9th Language Resources and Evaluation Conference, Reykjavic, Iceland.
- Katerina Pastra (22 March 2014), "*The grammar of...Action*", Interactive Exhibition of Science and Technology, Evgenideio Foundation, Athens, Greece.
- Katerina Pastra (3 October 2013), "*Robots need a Semantic Memory: Going beyond one-shot learning in Robotics*", Xperience Project Summer School on Robots bootstrapped through learning from experience, Mallorca, Spain.
- Katerina Pastra (23 July 2013), "*PRAXICON: towards a semantic memory like module for robots*", International Research-Centered Summer School in Cognitive Systems and Interactive Robotics, Social Media, Digital Preservation, Athens, Greece.
- Katerina Pastra (25-26 June 2013), "*Bridging Language, Perception and Action: the Cognitive Context of Machine Translation*", Plymouth University Cognition Institute Summer School on Bilingual Minds, Bilingual Machines, Plymouth, U.K..
- Katerina Pastra (7 June 2013), "*Syntax: Where Language and Action Meet*", Hellenic Cognitive Science Symposium, Athens, Greece.
- Katerina Pastra (24 May 2013), "*Scientific Presentations and Communication of Scientific Results*", Demokritos Research Center, Athens, Greece.
- Katerina Pastra (18-19 March 2013), "*Robots with Syntax, Robots with Memory: from one-shot learning to generalization*", RobotDoc - POETICON+ + Spring School on Developmental Robotics and Cognitive Bootstrapping, Athens, Greece.

- Katerina Pastra (25 January 2013), *“Knowledge representation for Robotic Applications”*, National Technical University of Athens, Department of Geographical Information Systems, Greece.
- Katerina Pastra (18 January 2013), *“An Action-centric Structure for a Semantic Memory for Robots”*, Orebro University, Department of Science and Technology, Sweden.
- Katerina Pastra (14 December 2012), *“Are all verbs equal? Language in Action in the Embodied Cognition Perspective”*, Vision & Language Network, Annual Meeting, Sheffield, U.K.
- Katerina Pastra (28 March 2012), *“Robots need Language”*, Working lunch on “European research leadership in robotics”, Altiero Spinelli Building, European Parliament, Brussels, Belgium.
- Katerina Pastra (22 February 2012), *“The POETICON and POETICON++ Projects”*, EU project presentations session, International Conference on Cognitive Systems, Vienna, Austria.
- Katerina Pastra (17 February 2012), *“Language, Cognition and Multimedia: The Art of Caricatures”*, BCA Lecture Series, Athens, Greece.
- Katerina Pastra (2 December 2011), *“Robots: myths, reality and intelligence”*, European Robotics Week Event organised by CSRI and AUEB, Athens University of Economics and Business, Athens, Greece.
- Katerina Pastra (7 August 2011), *“The minimalist grammar of action and the role of language”*, AAAI 2011 Workshop on “Language-Action Tools for Cognitive Artificial Agents: Integrating vision, action and language”, San Francisco, USA.
- Katerina Pastra (26 June-16 July 2011), *Lecture series on Action-Language and Vision*, Telluride Neuromorphic Cognition Engineering Summer School, Telluride, Colorado, USA.
- Katerina Pastra (14 June 2011), *“Bridging language, action and perception: the cognitive context of machine translation”*, ICANN 2011 workshop on “Context in Machine Translation”, Espoo, Finland.
- Katerina Pastra (27 January 2010), *“PRAXICON: a grounded, compositional & generative concept world”*, *EU Project Presentations, 4th International Conference in Cognitive Systems (CogSys 2010)*, ETH, Zurich, Switzerland.
- Katerina Pastra (18 June 2009), *“Lithic tools and language references: exploring language-action associations for a... PRAXICON”*, University of Parma, Final Project Meeting of the FP6-NEST project Hand2Mouth, Parma, Italy.
- Katerina Pastra (7 May 2009), *“From Lexicon to...PRAXICON: language-image-action associations”*, Institute of Archaeology, University College of London, London, U.K.
- Katerina Pastra (19 December 2008), *“PRAXICON: correlation of natural language, human body movements and images for artificial agents”*,

Computer Vision Speech Communication and Signal Processing Group,
National Technical University of Athens, Athens, Greece.

- Katerina Pastra (13 December 2008), "*From Lexicons to PRAXICONS: language-motion and images for artificial agents*", Language and Motion talk series, Neuropsychology Unit, Aiginition Hospital, Athens, Greece.
- Katerina Pastra (02 April 2008), "*The poetics of everyday life: grounding resources and mechanisms for artificial agents*", EU project presentations session, International Conference on Cognitive Systems, Karlsruhe, Germany.
- Katerina Pastra (15 February 2008), "*The POETICON project*", Athena Research Centre, Athens, Greece.
- Katerina Pastra (07 December 2007), "*Using linguistic terms to talk about semantics in a multimedia context*", Department of German Language and Linguistics, University of Athens, Greece.
- Katerina Pastra (19 June 2007), "REVEAL THIS and the COSMOROE cross-media relations framework", Natural Language Processing Group, Department of Computer Science, University of Sheffield, Sheffield, U.K.
- Katerina Pastra (05 September 2006), "Towards an all-inclusive cross-media decisions framework", Contributors short presentation in the NATO Advanced Study Institute on "*The Fundamentals of Verbal and Non-verbal Communication and the Biometrical Issue*" Vietri sul Mare, Italy.
- Katerina Pastra (20 July 2005), "*Vision-Language integration: a double-grounding case*", Institute for Language and Speech Processing, Athens, Greece
- Katerina Pastra (03 December 2003), "*Automatic indexing and retrieval of crime-scene photographs: having recourse to Natural Language Processing*", Natural Language and Information Processing Group, University of Cambridge, U.K.
- Katerina Pastra and Horacio Saggion (23 March 2001), "*Analysing Crime Scene Reports: the SOCIS project*", Forensic Linguistics Group, University of Birmingham, U.K.

Editor

- Research Topic on *Language and Cognition*, Frontiers in Robotics and Artificial Intelligence (co-editor with Nikos Mavridis)

Consulting/Reviewing

- **Winning Acuity Ltd., U.K.** (2017)

R&D Consultant on corpus development and annotation and Advisor on scientific and technological roadmapping and strategies for cognitive artificial intelligence products, Winning Acuity Ltd., London, U.K.

- **Danish Innovation Fund** (2015-ongoing)

Proposal Reviewer focussing on the R&D and the look forward perspective and industrial relation of the proposals

- **French National Research Agency (ANR)** (2014-ongoing)

R&D Proposal Reviewer for the Chistera Calls

- **European Commission Inclusive and Reflective Societies Unit** (2017-ongoing)

R&D Proposal Reviewer

- **European Commission Complex Systems and Advanced Computing Unit** (2016-ongoing)

R&D Proposal Reviewer

- **European Cooperation In Science and Technology (COST)** (2014-ongoing)

Networking activities proposal reviewer

- **Eurostars-Eureka** (2014-ongoing)

Reviewer of proposals by R&D performing SMEs

- **European Commission Robotics Unit** (2014-ongoing)

R&D Proposal Reviewer

- **European Commission DataValue Chain Unit** (2010-ongoing)

R&D Project and Proposal Reviewer

- Proposal Reviewer for **Levelhume Trust, U.K.**
- Proposal Reviewer for the **National Technical University of Crete, Greece**
- Proposal Reviewer for the **Economic and Social Research Council, U.K.**

Academic Paper Reviewing

- Language Resources and Evaluation, Springer Verlag
- Natural Language Engineering, Cambridge University Press
- Multimedia Tools and Applications, Springer Verlag
- Interaction Studies, John Benjamins Publishing Group
- Information Processing and Management, Elsevier Science
- Cognitive Science Conference (CogSci)
- EuroAsianPacific Conference in Cognitive Science (EAP-CogSci)
- Epigenetic Robotics (ICDL_EPIROB)
- Humanoids
- Association for Computational Linguistics (ACL) - conference
- Recent Advances in Natural Language Processing Conference (RANLP) - main conference and satellite workshops

- Language Resources and Evaluation Conference (LREC) – main conference and satellite workshops
 - European Conference in Information Retrieval (ECIR)
 - Designing for User Experience Conference (DUX)
 - International Workshop Series on Language Technology for Cultural Heritage, Social Sciences and Humanities
 - IJCAI-09 Workshop on Cross-Media Information Access and Mining
 - CVPR workshop and challenge on Looking at people and faces of the world (ChaLearn)
-
- Conference Session Chairing in Natural Language Processing sessions and Multimedia Corpora and Tools sessions.

Contribution to Roadmapping Activities and Innovation Panels

- **Nordic Translation Industry Forum (22-24 November 2017)**

By invitation-only brainstorming at the Innovation Panel of the event.

- **Ernst Strüngmann Forum (22 - 27 May 2017)**

By invitation-only scientific brainstorming and roadmapping event for the emerging field of "Interactive Task Learning"

- **European Parliament (28 March 2012)**

By invitation-only working lunch on "The Future of European Research Leadership in Robotics"

- **EUCognition Network (28-30 January 2011)**

By invitation-only event on "Challenges for Cognitive Systems", Rapperswil Castle, Switzerland

Organisation of events

- Organiser of the European Training School on "Vision and Language Integration in Cognitive Robotics", September 4-6 2017, Athens, Greece. (<http://ivl-net.eu/ivl-net-training-school-2017/>).
- Co-organiser of the Workshop on Vision and Language (VL'17), April 4 2017, at the 15th Annual Meeting of the European Association for Computational Linguistics (EACL), Valencia, Spain. (<http://vision.cs.hacettepe.edu.tr/vl2017>).
- Co-organiser of the Workshop on "Vision-Language Integration meets Multimedia Fusion", October 16 2016, at the ACM-Multimedia Conference, Amsterdam, The Netherlands. (http://liir.cs.kuleuven.be/Workshop_iv.html).
- Co-organiser of the Workshop on Vision and Language (VL'16), August 12, at the 54th Annual Meeting of the Association for Computational Linguistics (ACL), Berlin, Germany. (<http://vision.cs.hacettepe.edu.tr/vl2016/>).

- Co-organiser of the Workshop on Vision and Language 2015 (VL'15): "*Vision and Language Integration Meets Cognitive Systems*", hosted by the 2015 Conference on Empirical Methods in Natural Language Processing (EMNLP 2015), September 17-21, 2015, Lisbon, Portugal. (<https://sites.google.com/site/vl15workshop/>).
- Organiser of the POETICON++ ICDL-EPIROB Satellite Symposium on "*Action Generalization: What happens when Language, Perception and Action join forces?*", 16 October 2014, Genoa, Italy.
- Organiser of the AISB Symposium on "*Embodied vs. Simulated Behaviour and Cognition: What could Robotics contribute to Language Sciences?*", 1-4 April 2014, London, U.K.
- Organiser of the ROBOTDOC-POETICON++ Spring School on "*Developmental Robotics and Cognitive Bootstrapping*", 18-21 March 2013, Athens, Greece.
- Cross-media Semantics: *COSMOROE relations - A seminar series*, Cognitive Systems Research Institute, June 2012 & February 2013, Athens, Greece.
- Organiser of the two-day AAAI 2011 workshop on "*Language-Action Tools for Artificial Agents: Integrating Vision, Action and Language*", August 2011, San Francisco, USA.
- Organiser of the one-day POETICON workshop on "*Language Grounding for Artificial Agents*", December 2009, Athens, Greece
- Organiser of the POETICON-ILSP interdisciplinary talk series on *Natural Language, Neuropsychology and Cognitive Systems* (2009 - 2010) http://sifnos.ilsp.gr/Poeticon/ilsp_talks, ILSP, Athens (in collaboration with Dr Argiro Vatakis).
- Co-chair of the International Conference on Computer Vision Theory and Applications 2008 - Workshop on: "*Metadata Mining for Image Understanding*", January 2008, Madeira, Portugal (Collaboration with Dr. Gabriela Csurka, Visual Content Research Group, Xerox Research Centre, Grenoble, France).
- Organiser of the European Association for Computational Linguistics 2003 - Workshop on: "*Evaluation initiatives in Natural Language Processing: are evaluation methods, metrics and resources reusable?*", April 2003, Budapest, Hungary (awarded funding by the European Network in Human Language Technologies - ELSNET).
- Organiser of the Institute for Language, Speech and Hearing (ILASH) half-day workshop series (2000-2004), University of Sheffield:
 - *Dialogue Systems* (April 2004)
 - *Human Language Technologies for the Semantic Web* (March 2004)
 - *Biomedical text processing* (October 2003)
 - *Issues on the definition and creation of Ontologies* (May 2003)
 - *Automatic Summarization* (April 2003)
 - *Multimedia Information Processing* (February 2003)
 - *Multimedia Information Retrieval in the U.K.* (November 2002)

- *Multimodal perception and reasoning: cognitive processes and disorders* (Oct. 2002)
- *Plagiarism Detection* (May 2002)
- *Minority Languages and Computation* (May 2002)
- *Computational Language Resources II* (February 2002)
- *Computational Language Resources I* (October 2001)

International Societies/Groups Chair:

- Vice-Chair of the International Vision and Language Network (iV&L)
- Member of “*Language and Embodied Cognition Task Force*”, IEEE Computational Intelligence Chapter, Group on Autonomous Mental Development (2013 - ongoing, chair during 2013 & 2014)
<http://cis.ieee.org/autonomous-mental-development-tc.html>

Membership:

- IEEE (Institute of Electrical and Electronics Engineers) - awarded the status of **Senior Member (since December 2012)**
- AAAI (American Association of Artificial Intelligence)
- ACL (Association of Computational Linguistics)
- CogSci (Cognitive Science Society)
- EuCognition Network of Excellence
- HEPIS (Hellenic Professionals Informatics Society)
- EETN (Hellenic Artificial Intelligence Society)
- Open Research Society
- RAS-Cognitive Robotics Group