

Maria Evangelia Chatzimina

Personal Profile

Maria Chatzimina works as a Technical Staff member at Computational Medicine Laboratory (CML) of Institute of Computer Science at Foundation for Research and Technology - Hellas (FORTH). She received B.Sc. (2010) in Computer Science at Athens University of Economics and Business and Master of Science degree in the fields of Computational and Cognitive Vision and Robotics in Computer Science Department at the University of Crete (2013) and in the fields of Information, Learning and Cognition in Computer Science department at University Paris Sud 11 (2013). From January 2020 she is a PhD candidate at the Hellenic Mediterranean University in the research area of Biomedical Engineering, studying in the advice of Professor Manolis Tsiknakis the research topic “Conversational agents as a new diagnostic tool: a proof-of-concept study in the field of palliative care”.

Education

2020 – present

PhD Candidate

Hellenic Mediterranean University, Department of Electrical and Computer Engineering, Heraklion, Greece

Title: Conversational agents as a new diagnostic tool: a proof-of-concept study in the field of palliative care

Supervisor: Prof. Manolis Tsiknakis

2011 – 2013

Master of Science (M.Sc.)

Université de Paris XI - Orsay, Département d’Informatique, Unité de Formation et de Recherche Orsay, Paris, France

Title or qualification awarded: Master de Recherche en Informatique, Information, Apprentissage et Cognition

Thesis: Use of unsupervised word classes for supervised entity detection. Application to the detection of disorders in clinical reports.

Supervisor: Prof Pierre Zweigenbaum

2004 - 2010

Bachelor of Science (B.Sc.)

Athens University of Economics and Business, Department of Informatics Athens, Greece

Title or qualification awarded: Informatics of Economics and Business, Operations Research Informatics Economics, Database Systems and Knowledge Management

Professional Experience

October 2014 - present

Software Developer ICS-FORTH

Worked at p-MEDICINE, Eureka, iManageCancer, Bounce and MyPAL projects as software developer

iManageCancer - Empowering patients and strengthening self - management in cancer diseases. H2020-PHC-26-2014 No. 643529

- Design and Development of Personal Health Record system (PHR)
- Development of IOS, Android and Windows mobile healthcare application
- Software development of personalized healthcare system
- Development of unsupervised and supervised machine learning algorithms

EURECA - Enabling information re-Use by linking clinical Research and Care, FP7-ICT-2011.7, No 288048.

- Development of Personal Health Record system (PHR)
- Software development of personalized healthcare system

p-MEDICINE - From data sharing and integration via VPH models to personalized medicine, FP7-ICT-2009.5.3, No 270089.

- Development of Personal Health Record system (PHR)
- Software development of personalized healthcare system
- Development of machine learning algorithms

Bounce - Predicting Effective Adaptation to Breast Cancer to Help Women to BOUNCE Back (H2020)

- Data processing and Medical text mining
- Development of machine learning algorithms
- Software development of a personalized healthcare system

MyPAL- Fostering Palliative Care of Adults and Children with Cancer through Advanced Patient Reported Outcome Systems, SC1-BHC-23-2018 – No. 825872

- Development of a personalized healthcare platform for palliative care
- Development of mobile healthcare application

February 2013 to
September 2013

Graduate scholarship

Place of training: CNRS-LIMSI (Computer Science Laboratory for Mechanics and Engineering Sciences)

Research laboratory: ILES (Information, Language, written and Signed Group)

Name of Supervisor: Zweigenbaum Pierre

Research assistant/R&D engineer. Text mining, Use of unsupervised word classes for supervised entity detection. Application to the detection of disorders in clinical reports.

October 2011 to
January 2013

Graduate scholarship

Place of training: FORTH (Foundation of Research and Technology Hellas)
Institute of Computer Science

Research laboratory: CBML (Computational Medicine Laboratory)

Research assistant/R&D engineer. Worked on Machine Learning Algorithms, Graph Visualizations, Use of eConnectome (toolbox developed for imaging brain functional connectivity from electrophysiological signals)

June 2009 to
September 2009

Postgraduate training

Place of training: Athens

Name of organization providing training: SoulNet

Principal subjects/Occupational skills: Development of Asterisk PBX and applying human genes in Espresso Algorithm, a local minimization covered algorithm.

Teaching Experience

Fall semester
2020

Teaching Assistant of the class of Multimedia eHealth Services

Department of Electrical and Computer Engineering, Hellenic Mediterranean University

Main activities and responsibilities: Held laboratory classes and graded student assignments.

Name of Supervisor: Prof. Manolis Tsiknakis

Spring semester
2011

Teaching Assistant of the class of CS -100 Introduction to Computer Science

Computer Science Department, University of Crete

Main activities and responsibilities: Held extra lectures and graded student assignments.

Name of Supervisor: Dimitrios S. Nikolopoulos, Polyvios Pratikakis

Spring semester
2012

Teaching Assistant of the class of CS -150 Programming C++

Computer Science Department, University of Crete

Main activities and responsibilities: Held extra lectures and graded student assignments.

Name of Supervisor: Georgios Papagiannakis

Fall semester
2012

Teaching Assistant of the class of CS -150 Programming C++

Computer Science Department, University of Crete

Main activities and responsibilities: Held extra lectures and graded student assignments. Responsible for second assignment

Name of Supervisor: Xenophon Zamboulis

Personal skills and competences

Technical skills and competences

Expert: Python, Java, Matlab, PostgreSQL, Django, PHP, JavaScript, Unix

Basic knowledge: in C, Perl, R-statistic, C++, MySQL, Jsp

Markup languages/Data Models: XML, RDF, HTML, CSS, json

Languages

Greek (Native)

English-ILR level 4 (Full professional proficiency)

German-ILR level 0 (Basic)

Artistic skills and competences

Music (Piano) – Diploma in harmony

Driving license(s)

Category B (cars)

Additional information

Other certificates : Gmat score 570

Publications

Journal Articles

Koumakis, L., Kanterakis, A., Kartsaki, E., **Chatzimina, M.**, Zervakis, M., Tsiknakis, M., Potamias, G. (2016). MinePath: Mining for Phenotype Differential Sub-paths in Molecular Pathways. *PLoS computational biology*, 12(11), e1005187. doi:10.1371/journal.pcbi.1005187

Iatraki, G., Kondylakis, H., Koumakis, L., **Chatzimina, M.**, Marias, K., & Tsiknakis, M.N. (2018). Personal health information recommender: implementing a tool for the empowerment of cancer patients. *ecancer*, 12(852), doi: <https://doi.org/10.3332/ecancer.2018.852>.

Papers in Proceedings

Chatzimina, M., Koumakis, L., Marias K. and Tsiknakis, M. "Employing Conversational Agents in Palliative Care: A Feasibility Study and Preliminary Assessment," *2019 IEEE 19th International Conference on Bioinformatics and Bioengineering (BIBE)*, Athens, Greece, 2019, pp. 489-496, doi: 10.1109/BIBE.2019.00095.

Koumakis, L., Kondylakis, H., Katehakis, D.G., Iatraki, G., Argyropaidas, P., **Chatzimina, M.**, & Marias, K. (2017). A content-aware analytics framework for open health data. *International Conference in Biomedical and Health Informatics (ICBHI)*, Thessaloniki, Greece, 18-21 November 2017.

Koumakis, L., Kondylakis, H., **Chatzimina, M.**, Iatraki, G., Argyropaidas, P., Kazantzaki, E., Tsiknakis, M.,

Kiefer, S., Marias, M. Designing smart analytical data services for a personal health framework. *Studies in health technology and informatics*. 224, pp. 123-128

Kondylakis, H., Koumakis, L., Psaraki, M., Troullinou, G., **Chatzimina, M.**, Kazantzaki, E., Marias, K., & Tsiknakis, M.N. (2015). Semantically-enabled Personal Medical Information Recommender. *International Semantic Web Conference (ISWC), 2015, Bethlehem, Pennsylvania*.

Kondylakis, H., L. Koumakis, E. Kazantzaki, **M. Chatzimina**, M. Psaraki, K. Marias, and M. Tsiknakis. "Patient Empowerment through Personal Medical Recommendations." *MEDINFO 216 (2015): 1117*.

Maria Evangelia Chatzimina, Cyril Grouin, Pierre Zweigenbaum "Use of unsupervised word classes for entity recognition: Application to the detection of disorders in clinical reports." *LREC 2014: 3264-3271*

Katehakis, Dimitrios G., Angelina Kouroubali, Ioannis Karatzanis, Dimitris Manousos, Haridimos Kondylakis, G. Kavlentakis, Nikos Stathiakis, Lefteris Koumakis, **Maria Evangelia Chatzimina** and Kostas Marias. "Personal Health ICT Systems to Support Integrated Care Solutions." (2018).

Poster presentations

Kazantzaki, E., **Chatzimina, M.**, Koumakis, L., Roussos, P, Potamias, G.A., Marias, K., Tsiknakis, M.N., & Bitsios, P (2015). Διαδικτυακή εφαρμογή για την συλλογή φαινοτύπων για πρόωπη διάγνωση ψυχικών διαταραχών. *4th East European Psychiatric Congress & 3rd Preventive Psychiatry International Congress. Athens Greece 12-15 Nov. 2015*.

Katehakis, D.G., Kondylakis, H., Koumakis, L., Kouroubali, A., **Chatzimina, M.E.**, Karatzanis, I., Kavlentakis, G., Manousos, D., Stathiakis, N., & Marias, K. (2017). "Personal Health Record Functional Models to support Intergrated Care Solutions". Poster Presentation at the 11th Scientific Conference FORTH, Heraklion, Greece, October 13-14.