Maria Chatzimina

LinkedIn: https://www.linkedin.com/in/maria-chatzimina/

Google Scholar: https://scholar.google.com/citations?user=0RUR5OkAAAAJ&hl=en

ORCID: https://orcid.org/0000-0003-2008-6772

ABOUT ME

Maria Chatzimina received the B.Sc. degree in Computer Science in 2010 from the Department of Informatics at the Athens University of Economics and Business (AUEB). She earned an M.Sc. degree (2013) in Computer Science, Graphics, Computational Vision and Robotics from the Department of Computer Science of the University of Crete and also holds an M.Sc. degree in Computer Science with a specialization in Biomedical Informatics, Learning, and Cognition from the Department of Computer Science at the University of Paris Sud 11. She works as a software engineer at the Computational BioMedicine Laboratory (CBML) of Institute of Computer Science at Foundation for Research and Technology – Hellas (FORTH). She has participated in multiple European programs such as EURECA (FP7-ICT-2011.7, No 288048), P-MEDICINE (FP7-ICT-2009.5.3, No 270089), iManageCancer (H2020 – PHC-26-2014-643529) and MyPAL (SC1-BHC-23-2018 – No. 825872) and has contributed in the design, implementation and integration of various heterogeneous systems in the health care informatics domain. She is a PhD candidate at the Hellenic Mediterranean University in the research area of Biomedical Informatics, studying the research topic "Conversational agents as a new diagnostic tool: a proof-of-concept study in the field of palliative care".

WORK EXPERIENCE

[01/11/2013 – Current]

Software Engineer

Foundation for Research and Technology - Hellas (FORTH)

CardioCare - An interdisciplinary approach for the management of the elderly multimorbid patient with breast cancer therapy induced cardiac toxicity. Funded under Horizon H2020- SC1-BHC-24-2020 /H2020
    1. Development of an Android application for incontinence management
Technologies: Flutter, Dart

MyPAL- Fostering Palliative Care of Adults and Children with Cancer through Advanced Patient Reported Outcome Systems, SC1-BHC-23-2018 – No. 825872
    1. Trained language models in English and Greek language in health domain
    2. Development of a chatbot for patients with hematologic malignancies
    3. Development of a personalized healthcare platform for palliative care
Technologies: HTML, JavaSript, PHP, Integrating APIs, Rasa Framework, Flutter, Dart

iManageCancer - Empowering patients and strengthening self - management in cancer diseases. H2020-PHC-26-2014 No. 643529
    1. Design and Development of Personal Health Record system (PHR)
    2. Development of IOS, Android and Windows mobile healthcare application
Technologies: Python, Django, PostgreSQL, PHP, HTML, JavaScript

EURECA - Enabling information re-Use by linking clinical Research and Care, FP7-ICT-2011.7, No 288048.
    1. Development of Personal Health Record system (PHR)
Technologies: Python, Django, PostgreSQL, PHP, HTML, JavaScript

p-MEDICINE - From data sharing and integration via VPH models to personalized medicine, FP7-ICT-2009.5.3, No 270089.
    1. Software development of personalized healthcare system

Bounce - Predicting Effective Adaptation to Breast Cancer to Help Women to BOUNCE Back (H2020)
   1. Data processing and Medical text mining

[01/10/2011 – 31/10/2013] **Graduate scholarship**

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

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)

[31/01/2013 – 28/09/2013] **Graduate scholarship**

CNRS-LIMSI (Computer Science Laboratory for Mechanics and Engineering Sciences)

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.

EDUCATION AND TRAINING

[31/12/2019 – Current] **PhD Candidate**

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

Field(s) of study: Natural Language Processing
Thesis: Conversational agents as a new diagnostic tool: a proof-of-concept study in the field of palliative care

[2011 – 2013] **Master of Science (M.Sc.)**

University of Crete, Department of Computer Science, Heraklion, Greece

Field(s) of study: Master in Computer Science, Graphics, Computer Vision and Robotics

[2012 – 2013] **Master of Science (M.Sc.)**

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

Field(s) of study: 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.

[2004 – 2010] **Bachelor of Science (B.Sc.)**

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

Field(s) of study: Informatics of Economics and Business, Operations Research Informatics Economics, Database Systems and Knowledge Management

TEACHING EXPERIENCE-

[10/2023 – 02/2024] **Teaching Assistant Advanced Topics in Biomedical Engineering**

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

[03/2023 – 07/2023]	**Teaching Assistant Biomedical Informatics**
	Hellenic Mediterranean University, Department of Electrical and Computer Engineering, Heraklion, Greece
[10/2020 – 02/2023]	**Teaching Assistant Programming Course Multimedia eHealth Services (Flutter/Dart)**
	Hellenic Mediterranean University, Department of Electrical and Computer Engineering, Heraklion, Greece
[02/2020 – 06/2020]	**Teaching Assistant Programming Course Data Structures**
	Hellenic Mediterranean University, Department of Electrical and Computer Engineering, Heraklion, Greece
[09/2012 – 02/2013]	**Teaching Assistant Programming Course CS-100 (C language)**
	University of Crete, Department of Computer Science, Heraklion, Greece
[02/2012 – 07/2012]	**Teaching Assistant Programming Course CS-150 (C++ language)**
	University of Crete, Department of Computer Science, Heraklion, Greece
[09/2011 – 02/2012]	**Teaching Assistant Programming Course CS-100 (C language)**
	University of Crete, Department of Computer Science, Heraklion, Greece

LANGUAGE SKILLS

Mother tongue(s): Greek

Other language(s):

English

LISTENING C2 **READING** C2 **WRITING** C2

SPOKEN PRODUCTION C2 **SPOKEN INTERACTION** C2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

DIGITAL SKILLS

Python | Rasa framework | AI platform: Pytorch, Tensorflow etc. | Mobile Development: Flutter & Dart | PHP Language | Restful APIs | Basic Git knowledge | PostgreSQL, MySQL | Linux | CSS | HTML | JavaScript | Google DialogFlow | Java | Machine Learning Algorithms (Supervised Unsupervised)

PUBLICATIONS

Sentiment Analysis in Greek Clinical Conversations: A Comparative Study of BERT, VADER, and Lexicon Approaches

Maria Evangelia Chatzimina, Nikolaos Oikonomou, Helen Papadaki, Manolis Tsiknakis, Charalampos Pontikoglou

2023 IEEE International Conference on Bioinformatics and Biomedicine (BIBM)

doi: 10.1109/BIBM58861.2023.10385833

Designing a conversational agent for patients with hematologic malignancies: Usability and Usefulness Study

Chatzimina, M., Papadaki, H., Pontikoglou, C., Koumakis, L., Marias, K. and Tsiknakis, M.,

2021 IEEE EMBS International Conference on Biomedical and Health Informatics (BHI), pp. 1-4,

doi:10.1109/BHI50953.2021.9508587.

Employing Conversational Agents in Palliative Care: A Feasibility Study and Preliminary Assessment

Chatzimina, M., Koumakis, L., Marias K. and Tsiknakis, M. 2019 IEEE 19th International Conference on Bioinformatics and Bioengineering (BIBE), Athens, Greece, pp. 489-496, doi: 10.1109/BIBE.2019.00095.

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

Maria Evangelia Chatzimina, Cyril Grouin, Pierre Zweigenbaum LREC 2014: 3264-3271

Fostering Palliative Care Through Digital Intervention: A Platform for Adult Patients With Hematologic Malignancies.

Koumakis, L., Schera, F., Parker, H., Bonotis, P., **Chatzimina, M.**, Argyropaidas, P., Zacharioudakis, G., Schäfer, M., Kakalou, C., Karamanidou, C., Didi, J., Kazantzaki, E., Scarfo, L., Marias, K., & Natsiavas, P. (2021). Frontiers in digital health, 3, 730722. https://doi.org/10.3389/fdgth.2021.730722

AquaScouts: ePROs Implemented as a Serious Game for Children with Cancer to Support Palliative Care.

Hoffmann, S., Schraut, R., Kröll, T., Scholz, W., Belova, T., Erhardt, J., Gollmer, D., Mauck, C., Zacharioudakis, G., Meyerheim, M., Bonotis, P., Kakalou, C., **Chatzimina, M.**, Karamanidou, C., Sander, A., Didi, J., Graf, N., & Natsiavas, P. (2021). Frontiers in digital health, 3, 730948. https://doi.org/10.3389/fdgth.2021.730948

Designing smart analytical data services for a personal health framework.

Koumakis, L., Kondylakis, H., **Chatzimina, M.**, Iatraki, G., Argyropaidas, P., Kazantzaki, E., Tsiknakis, M., Kiefer, S., Marias, M. Studies in health technology and informatics. 224, pp. 123-128

Personal health information recommender: implementing a tool for the empowerment of cancer patients. ecancer,

Iatraki, G., Kondylakis, H., Koumakis, L., **Chatzimina, M.**, Marias, K., & Tsiknakis, M.N. (2018). 12(852), doi: https://doi.org/10.3332/ecancer.2018.852.

A content-aware analytics framework for open health data

L Koumakis, H Kondylakis, DG Katehakis, G Iatraki, P Argyropaidas, **M Hatzimina**, K Marias

doi: 10.1007/978-981-10-7419-6_10

MinePath: mining for phenotype differential sub-paths in molecular pathways

Lefteris Koumakis, Alexandros Kanterakis, Evgenia Kartsaki, **Maria Chatzimina**, Michalis Zervakis, Manolis Tsiknakis, Despoina Vassou, Dimitris Kafetzopoulos, Kostas Marias, Vassilis Moustakis, George Potamias

doi: 10.1371/journal.pcbi.1005187

Designing smart analytical data services for a personal health framework.

Koumakis, L., Kondylakis, H., **Chatzimina, M.**, Iatraki, G., Argyropaidas, P., Kazantzaki, E., Tsiknakis, M., Kiefer, S., Marias, M. Studies in health technology and informatics. 224, pp. 123-128

doi: 10.3233/978-1-61499-653-8-123

Semantically-enabled Personal Medical Information Recommender.

Haridimos Kondylakis, Lefteris Koumakis, Maria Psaraki, Georgia Troullinou, **Maria Chatzimina**, Eleni Kazantzaki, Konstantinos Marias, Manolis Tsiknakis

Patient Empowerment through Personal Medical Recommendations.

Haridimos Kondylakis, Lefteris Koumakis, Eleni Kazantzaki, **Maria Chatzimina**, Maria Psaraki, Kostas Marias, Manolis Tsiknakis

Full list of publications

https://scholar.google.com/citations?user=0RUR5OkAAAAJ&hl=en