# Magdalini Eirinaki

PhD in Computer Science, Athens Univ. of Economics and Business, Greece

MSc in Advanced Computing, Imperial College, University of London, UK

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#### Education

BSc in Computer Science, University of Piraeus, Greece September 1998 **Employment** San Jose State University, Computer Engineering Department August 2018 - present Professor San Jose State University, Computer Engineering Department August 2013 - July 2018 Associate Professor University of California, Santa Cruz, Computer Science Department Spring 2015 (sabbatical leave) Visiting senior researcher, LINQS group San Jose State University, Computer Engineering Department August 2007 - July 2013 Assistant Professor University of California, Santa Cruz, Information Systems Management Department 2007 Lecturer (Spring '07) **EXODUS S.A., Greece** 2007 Contractor, participated in European Union R&D Projects University of California, Santa Cruz 2006 - 2007 Visiting Researcher 2004 - 2005 Hellenic Parliament, Greece Research Associate of Member of Hellenic Parliament (MP), Minister Alekos Papadopoulos 2002 - 2005 Athens Univ. of Economics and Business, Greece Teaching Assistant, Computer Science Department Athens Univ. of Economics and Business, Greece 2001 - 2006 Research Assistant in European and National R&D Projects and Thematic Networks UNISYSTEMS A.E. Computer Systems, Greece 2000 - 2001 Software Engineer National Bank of Greece (Educational Center), Greece 1998 Intern

May 2006

August 2000

# Journal Publications

- R. Campbell, M. Eirinaki, Y. Park, "Scalable and Autonomous Network Defense Using Reinforcement Learning", IEEE Access, vol. 12, pp. 92919-92930 (2024)
- D. Lilienthal, P. Mello, M. Eirinaki, S. Tiomkin, "Multi-Resolution Diffusion for Privacy-Sensitive Recommender Systems", IEEE Access, vol. 12, pp. 58275-58287 (2024)
- D. Tallapally, J. Wang, K. Potika, M. Eirinaki, "Using Graph Neural Networks for Social Recommendations", Algorithms, 16(11), 516, November 2023
- M. Eirinaki, I. Varlamis, J. Dahihande, A. Jaiswal, A. A. Pagar, A. Thakare, "Real-time recommendations for energy-efficient appliance usage in households", Frontiers in Big Data, Sec. Recommender Systems, Vol.5, September 2022
- Y. Himeur, A. Sayed, A. Alsalemi, F. Bensaali, A. Amira, I. Varlamis, M. Eirinaki, C. Sardianos, G. Dimitrakopoulos,
   "Blockchain-based recommender systems: Applications, challenges, and future opportunities", Computer Science Review,
   Vol. 43, February 2022
- M. Eirinaki, J. Gao, L. Khan, S. Mazumder, K. Potika, "Big Data and Smart Cities", (editorial) Big Data Research journal, Vol. 17, pp. 33-34, September 2019
- M. Eirinaki, S. Dhar, S. Mathur, A. Kaley, A. Patel, A. Joshi, D. Shah, "A Building Permit System for Smart Cities: A Cloud-based Framework", Computers, Environment and Urban Systems, Vol. 70, pp. 175-188, July 2018

- S. Dharia, M. Eirinaki, V. Jain, J. Patel, I. Varlamis, J. Vora, R. Yamauchi, "Social Recommendations for Personalized Fitness Assistance", Personal and Ubiquitous Computing, special issue on Wearable Systems for e-Health and Well-being, Vol. 22, No. 1, pp. 245-257, April 2018
- M. Eirinaki, J. Gao, I. Varlamis, K. Tserpes, "Recommender Systems for Large-Scale Social Networks: A review of challenges and solutions", editorial, Future Generation Computer Systems, Vol. 78, part 1, pp. 413-418, January 2018
- N. Moniz, L. Torgo, M. Eirinaki, P. Branco, "A Framework for Recommendation of Highly Popular News Lacking Social Feedback", New Generation Computing
- M. Eirinaki, S. Abraham, N. Polyzotis, N. Shaikh, "QueRIE: Collaborative Database Exploration", in IEEE Transactions on Knowledge and Data Engineering (TKDE), Vol. 26, No. 7, pp. 1778-1790, July 2014
- M. Eirinaki, M. Louta, I. Varlamis, "A Trust-Aware System for Personalized User Recommendations in Social Networks", in IEEE Transactions on Systems, Man, and Cybernetics: Systems (TSMC), Vol. 44, No. 4, pp.409-421, April 2014
- M. Eirinaki, S. P. Singh Monga, S. Sundaram, "Identification of Influential Social Networkers", in International Journal of Web Based Communities, Vol. 8, No. 2, pp. 136 – 158, 2012
- M. Eirinaki, S. Pisal, J. Singh, "Feature-based Opinion Mining and Ranking", in Journal of Computer and System Sciences, special issue on "Information Retrieval, Decision Making Process and User Needs in Ubiquitous and Collaborative Computing", Vol. 78, Issue 4, pp. 1175 1184, July 2012
- P. Giannikopoulos, I. Varlamis, M. Eirinaki, "Mining Frequent Generalized Patterns for Web Personalization in the Presence of Taxonomies", in International Journal of Data Warehousing and Mining, Vol. 6, No.1, pp. 58 - 76, 2010
- M. Eirinaki and M. Vazirgiannis. "Web Site Personalization based on Link Analysis and Navigational Patterns", in ACM Transactions on Internet Technology (TOIT), Vol.7, No.4, pp. 21:1 – 21:27, October 2007
- M. Eirinaki and M. Vazirgiannis. "Web Mining for Web Personalization", in ACM Transactions on Internet Technology (TOIT), Vol.3, No.1, pp. 1-27, February 2003

# Conference & Workshop Publications (peer – reviewed)

- K. Wanaskar, G. Jena, M. Eirinaki, "Multimodal Benchmarking and Recommendation of Text-to-Image Generation Models", (best paper award) in Proc. of the 11th IEEE Intl. Conference on Big Data Services and Machine Learning Applications (BigDataService 2025), July 2025, Tucson, AZ
- T. Guttula, J. Lu, A. Dang, G. Dominose, M. Eirinaki, "LifeTone: Personalized Skin Care Analysis at your Fingertips", CSU 2025, 5th annual Computer Science conference for CSU Undergraduates, online, April 2025
- M. Alvarez-Lopez, M. Eirinaki, "The Impact of Tree Data on Urban Heat Island Mapping: A San José Case Study", (to appear) in Proc. of the 2025 IEEE Conference on Artificial Intelligence (CAI 2025), Santa Clara CA, May 2025
- V. Escuerdo, S. Talavera, G. S. Thampy, I. Torres, D. Vega Lojo, C. Kanich, M. Eirinaki, "Cloudsweeper: Leveraging Large Language Models to Personalize Sensitive Archive Search", poster paper, in Proc. of the 6th Silicon Valley Cybersecurity Conference (SVCC 2025), June 2025, Santa Clara, CA
- K. Malempati, P. R. Kotigari, K. S. Teja, M. Eirinaki, "Federated Learning on Recommender Systems", in Proc. of 2024
   IEEE Intl. Conf. on Big Data (IEEE BigData 2024), December 2024, Washington DC
- J. Guzman, M. Eirinaki, "Deep Learning in AI Medical Imaging for Stroke Diagnosis", poster presentation, 2023 Biomedical Engineering Symposium (BMES 2023), October 2023, Seattle, WA
- H. Yang, K. Wanaskar, H. Shrivastava, S. Mansahia, S. Richhariya, M. Eirinaki, "Prompt Recommendations for AI Art", in Proc. of the Artificial Intelligence & Knowledge Engineering conference (AIKE 2023), September 2023, Laguna Hills, CA
- P. S. Bhusari, S. N. Hunur, R. K. Tanti, S. R. Warathe, M. Eirinaki, "Distress Signal Recognition Using Pose Estimation and Neural Networks", in Proc. of the 11th IEEE Intl. Conf. on Mobile Cloud Computing, Services, and Engineering (MobileCloud 2023), July 2023, Athens, Greece
- R. Campbell, M. Eirinaki, Y. Park, "A Curriculum Framework for Autonomous Network Defense using Multi-agent Reinforcement Learning", (best paper award) in Proc. Of the 4th Silicon Valley Cybersecurity Conference (SVCC 2023), May 2023, Burlingame, CA
- A. Jagannathan, B. Chandrasekaran, S. Dutta, U. R. Patil, M. Eirinaki, "Original Music Generation using Recurrent Neural Networks with Self-Attention", in Proc. of the 4th IEEE Intl. Conference on AI Testing (AITest 2022), August 2022, San Francisco Bay Area, CA, USA

- J. Lu, M. Eirinaki, "Can a machine win a Grammy? An evaluation of AI-generated song lyrics", in Proc. of the 2021 IEEE Int. Conf. on Big Data (IEEE BigData 2021), December 2021, Orlando, FL (online)
- S.A. Aduwala, M. Arigala, S. Desai, H. J. Quan, M. Eirinaki, "Deepfake Detection using GAN Discriminators", in Proc. of the 7th IEEE Intl. Conference on Big Data Services and Machine Learning Applications (BigDataService 2021), August 2021, virtual
- Y. Brahmankar, Z. Pachodiwale, N. Parakh, D. J. Patel, M. Eirinaki, "Intelligent Eye: A Navigation Assistant for the Visually Impaired", in Proc. of the 23rd Intl. Conference on Human-Computer Interaction (HCI International 2021), July 2021, Washington DC, USA (online)
- A. Garg, N. Trivedi, J. Lu, M. Eirinaki, B. Yu, F. Olumofin, "An evaluation of machine learning methods for domain name classification", in Proc. of 2020 IEEE Int. Conf. on Big Data (IEEE BigData 2020), December 2020 (online)
- J. Dahihande, A. Jaiswal, A. A. Pagar, A. Thakare, M. Eirinaki, I. Varlamis, "Reducing energy waste in households through real-time recommendations", in Proc. of the 14th ACM Recommender Systems Conference (RecSys 2020), September 2020, Brazil (online)
- T-M. Huang, H. Hsieh, J. Qin, H-F. Liu, M. Eirinaki, "Play it again IMuCo! Music composition to match your mood", in Proc. of the 2nd Conference on Transdisciplinary AI (TransAI 2020), September 2020, Irvine, CA (online)
- A. Singh, N. Dharamshi, P. T. Govarthanarajan, P. D. Samale, M. Eirinaki, "The Tipping Point in Social Networks: Investigating the Mechanism behind Viral Information Spreading", in Proc. of the 6nd IEEE Intl. Conference on Big Data Services and Machine Learning Applications (BigDataService 2020), August 2020, Oxford, UK (online)
- D. Talwar, S. Guruswamy, N. Ravipati, M. Eirinaki, "Evaluating Validity of Synthetic data in Perception tasks for Autonomous Vehicles", in Proc. of the 2nd IEEE Intl. Conference on AI Testing (AITest 2020), August 2020, Oxford, UK (online)
- M. Daswani, K. Desai, M. Patel, R. Vani, M. Eirinaki, "CollegeBot: A Conversational AI Approach to Help Students Navigate College", in Proc. of the 22nd Intl. Conference on Human-Computer Interaction (HCI International 2020), July 2020, Copenhagen, Denmark (online)
- J. Lu, N. T. Saunshi, A. Mangune, M. Eirinaki, B. Yu, C. Liu, "A SERP-Mining Approach for DNS Requests", in Proc. of 2019 IEEE Int. Conf. on Big Data (IEEE BigData 2019), special session on Intelligent Data Mining, December 2019, Los Angeles, CA, USA
- A. Boriya, S. S. Malla, R. Manjunath, V. Velicheti, M. Eirinaki, "ViSeR: A Visual Search Engine for e-Retail", in Proc. of Transdisciplinary AI 2019 (TransAI 2019), Laguna Hills, CA, September 2019
- A. Mathur, S. K. Juguru, M. Eirinaki, "A graph-based recommender system for food products", in Proc. of Graph Computing 2019 (GC 2019), Laguna Hills, CA, September 2019
- N. Mantas, M. Louta, I. Varlamis, M. Eirinaki, "The effect of global and local influence models on the quality of recommendations", in Proc. of the 2019 Intl. Symposium on Performance Evaluation of Computer and Telecommunication Systems (SPECTS 2019), Berlin, Germany, July 2019
- I. Pradhan, K. Potika, M. Eirinaki, P. Potikas, "Exploratory Data Analysis and Crime Prediction for Smart Cities", in Proc. of 23rd Intl. Database Engineering & Applications Symposium (IDEAS 2019), Athens, Greece, June 2019
- A. Gulati, M. Eirinaki, "With a little help from my friends (and their friends): Influence neighborhoods for social recommendations", in Proc. of The Web Conference 2019 (WWW 2019), San Francisco, CA, May 2019
- A. Gulati, M. Eirinaki, "Influence Propagation for Social Graph-based Recommendations", in Proc. of 2018 IEEE Int.
   Conf. on Big Data (IEEE BigData 2018), December 2018, Seattle, WA, USA
- B. Patel, V. Kakuste, M. Eirinaki, "CaPaR: A Career Path Recommendation Framework", in Proc. of the 3rd Intl. Conf. on Big Data Computing Service and Applications (IEEE BigDataService 2017), April 2017, San Francisco Bay, CA, USA
- C. Sardianos, I. Varlamis, M. Eirinaki, "Scaling Collaborative Filtering to large-scale Bipartite Ratings Graphs using Lenskit
  and Spark", in Proc. of the 3rd Intl. Conf. on Big Data Computing Service and Applications (IEEE BigDataService 2017),
  April 2017, San Francisco Bay, CA, USA
- C. Balchandani, P. Makkar, P. Yelure, R. K. Hatwar, Y. Shah, M. Eirinaki, "A Deep Learning Framework for Smart Street Cleaning", in Proc. of the IEEE Intl. Workshop on Big Data Applications in Smart City Development, in conj. with IEEE BigDataService 2017, April 2017, San Francisco Bay, CA, USA
- N. Moniz, L. Torgo, M. Eirinaki, P. Branco, "Time-Based Ensembles for Prediction of Rare Events in News Streams", in Proceedings of the 2nd Intl. Workshop on Data Science for Social Media and Risk (SOMERIS 2016), in conjuction with IEEE Intl. Conf. on Data Mining (ICDM 2016), December 2016, Barcelona, Spain

- M. Eirinaki, N. Moniz, K. Potika, "Threshold-Bounded Influence Dominating Sets for Recommendations in Social Networks", in Proceedings of the 9th IEEE Intl. Conf. on Social Computing and Networking (SOCIALCOM 2016), Atlanta, GA, USA, October 2016
- M. Eirinaki, S. Dhar, S. Mathur, "A Cloud-based Framework for Smart Permit System for Buildings", in Proceedings of the IEEE 2nd Intl. Smart Cities Conference (ISC2 2016), Trento, Italy, September 2016
- S. Dharia, V. Jain, J. Patel, J. Vora, R. Yamauchi, M. Eirinaki, I. Varlamis, "PRO-Fit: Exercise with friends", demo paper, in Proceedings of the 2016 IEEE/ACM Intl. Conf. on Advances in Social Networks Analysis and Mining (ASONAM 2016), San Francisco, CA, USA, August 2016
- S. Dharia, V. Jain, J. Patel, J. Vora, S. Chawla, M. Eirinaki, "PRO-Fit: A personalized fitness assistant framework", in Proceedings of the 28th Intl. Conf. on Software Engineering and Knowledge Engineering (SEKE 2016), Redwood City, CA, USA, July 2016
- M. Eirinaki, S. Patel, "QueRIE Reloaded: Using Matrix Factorization to Improve Database Query Recommendations", in Proceedings of 2015 IEEE Intl. Conference on Big Data (IEEE BigData 2015), special session on Intelligent Mining, Santa Clara, CA, October 2015
- P. Kouki, S. Fakhraei, J. Foulds, M. Eirinaki, L. Getoor, "HyPER: A Flexible and Extensible Probabilistic Framework for Hybrid Recommender Systems", in Proceedings of the 9th ACM Conference on Recommender Systems (RecSys 2015), Vienna, Austria, September 2015
- D. Proios, M. Eirinaki, I. Varlamis, "TipMe: Personalized advertising and aspect-based opinion mining for users and businesses", in Proceedings of the 2015 IEEE/ACM Intl. Conf. on Advances in Social Networks Analysis and Mining / SoMeRis: Social Media and Risk (SOMERIS/ASONAM 2015), Paris, France, August 2015
- J. Tsao, M. Eirinaki, "A Human-Centered Credit-Banking System for Convenient and Secure Carpooling among Members of an Association", (presentation) in Proc. of 6th Intl. Conference on Applied Human Factors and Ergonomics (AHFE 2015), July 2015, Las Vegas, NV
- V. Suresh, S. Roohi, M. Eirinaki, "Aspect-Based Opinion Mining and Recommendation System for Restaurant Reviews", in Proceedings of the 8th ACM Conference on Recommender Systems (RecSys 2014), October 2014, Foster City, CA
- V. Suresh, S. Roohi, M. Eirinaki, I. Varlamis, "Using Social Data for Personalizing Review Rankings", in Proceedings of the 6th ACM RecSys Workshop on Recommender Systems & the Social Web (RSWeb 2014), October 2014, Foster City, CA
- S. Tragopoulou, I. Varlamis, M. Eirinaki, "Classification of movement data concerning user's activity recognition via mobile phones", in Proceedings of the 4th Intl. Conf. on Web Intelligence, Mining and Semantics (WIMS 2014), June 2014, Thessaloniki, Greece
- K. Jangid, P. Paul, M. Eirinaki, "A mobile application for stock market prediction using sentiment analysis", in Proceedings of the 24th International Conference on Software Engineering and Data Engineering (SEKE 2012), July 2012, San Francisco, CA
- S. Pisal, J. Singh, M. Eirinaki, "AskUs: an Opinion Search Engine", demo paper, in Proceedings of the 2011 edition of the IEEE International Conference on Data Mining series (ICDM 2011), December 2011, Vancouver, Canada
- G. Chatzopoulou, M. Eirinaki, S. Koshy, S. Mittal, N. Polyzotis, J.S. Vindhiya Varman, "The QueRIE system for Personalized Query Recommendations", in IEEE Data Engineering Bulletin (invited), Vol. 34, No. 2, June 2011, pp. 56-61
- A. Stavrianou, M. Eirinaki, "A Personalized Forum Environment", in Proceedings of the 7th Intl. Conference on Web Information Systems and Technologies (WEBIST 2011), May 2011, The Netherlands
- J. Akbarnejad, G. Chatzopoulou, M. Eirinaki, S. Koshy, S. Mittal, D. On, N. Polyzotis, J. S. Vindhiya Varman, "SQL QueRIE Recommendations", demo paper, in Proceedings of the 2009 edition of the 36th Intl. Conference on Very Large Databases (VLDB 2010), September 2010, Singapore
- J. Akbarnejad, M. Eirinaki, S. Koshy, D. On, N. Polyzotis, "SQL QueRIE Recommendations: a query fragment-based approach", in Proceedings of the 4th International Workshop on Personalized Access, Profile Management, and Context Awareness in Databases (PersDB 2010, in conjuction with VLDB 2010), September 2010, Singapore
- I. Varlamis, M. Eirinaki, M. Louta, "A study on social network metrics and their application in trust networks", in Proc. of the 2010 International Conference on Analysis of Social Networks and Mining (ASONAM 2010), pp. 168 175, August 2010, Odense, Denmark
- S. Mittal, J. S. Vindhiya Varman, M. Eirinaki, G. Chatzopoulou, N. Polyzotis, "QueRIE: A Recommender System supporting Interactive Database Exploration", demo paper, in Proc. of the 2009 edition of the IEEE International Conference on Data Mining series (ICDM 2009), December 2009, Miami, Florida (in Proc. of ICDM 2010 due to an editor's error)

- G. Chatzopoulou, M. Eirinaki, N. Polyzotis, "Προτάσεις ερωτημάτων για διαδραστική εξερεύνηση βάσεων δεδομένων", in Proc. of the 8th Hellenic Symposium of Database Systems (HDMS 2009), September 2009, Athens, Greece
- G. Chatzopoulou, M. Eirinaki, N. Polyzotis, "Collaborative Filtering for Interactive Database Exploration", in Proc. of the 21st International Conference on Scientific and Statistical Databases (SSDBM 2009), pp. 3 18, June 2009, New Orleans, Louisiana
- A. Patel, N. Sharma, M. Eirinaki, "Negative Database for Data Security", in Proc. of the International Conference of Computing in Engineering, Science and Information (ICC 2009), April 2009, Fullerton, CA
- G. Giannopoulos, T. Dalamagas, M. Eirinaki, T. Sellis, "Boosting the Ranking Function Learning Process using Clustering", in Proc. of the 10th ACM International Workshop on Web Information and Data Management (WIDM 2008), pp. 125-132, October 2008, Napa Valley, CA
- P. Giannikopoulos, I. Varlamis, M. Eirinaki, "Mining Frequent Generalized Patterns for Web Personalization", in Proc. of the ECAI 2008 Workshop on Mining Social Data (MSoDA 2008), pp.11-15, July 2008, Patras, Greece
- T. Dalamagas, P. Bouros, T. Galanis, M. Eirinaki, T. Sellis, "Mining User Navigation Patterns for Personalizing Topic Directories", in Proc. of the 9th ACM International Workshop on Web Information and Data Management (WIDM 2007), pp. 81-88, November 2007, Lisboa, Portugal
- M. Eirinaki, and M. Vazirgiannis. "UPR: Usage-based Page Rank for Web Personalization", in Proc. of the 5th Hellenic Data Management Symposium (HDMS 2006), September 2006, Thessaloniki, Greece
- M. Eirinaki and M. Vazirgiannis. "Usage-based PageRank for Web Personalization", in Proc. of 5th IEEE International Conference on Data Mining (ICDM 2005), pp. 130-137, November 2005, Houston, Texas
- M. Eirinaki, M. Vazirgiannis, and D. Kapogiannis. "Web path recommendations based on Page Ranking and Markov Models", in Proc. of the 7th ACM International Workshop on Web Information and Data Management (WIDM 2005), pp. 2-9, November 2005, Bremen, Germany
- M. Eirinaki, D. Mavroeidis, G. Tsatsaronis, M. Vazirgiannis, "Introducing Semantics in Web Personalization: The Role of Ontologies", in Proc. of Semantics, Web, and Mining, Joint International Workshops (EWMF/KDO 2005), pp. 147-162, October 2005, Porto, Portugal
- M. Eirinaki, C. Lampos, S. Paulakis, and M. Vazirgiannis. "Web Personalization Integrating Content Semantics and Navigational Patterns", in Proc. of the 6th ACM International Workshop on Web Information and Data Management (WIDM 2004), pp. 72-79, November 2004, Washington D.C., USA
- S. Paulakis, C. Lampos, M. Eirinaki, and M. Vazirgiannis. "SEWeP: A Web Mining System supporting Semantic Personalization", demo paper, in Proc. of the 15th European Conference on Machine Learning and the 8th European Conference on Principles and Practice of Knowledge Discovery in Databases (ECML/PKDD 2004), pp. 552-554, September 2004, Pisa, Italy
- C. Lampos, M. Eirinaki, D. Jevtuchova, and M. Vazirgiannis. "Archiving the Greek Web", in Proc. of the 4th International Web Archiving Workshop (IWAW'04), September 2004, Bath, UK
- M.Eirinaki, M. Vazirgiannis, and I. Varlamis. "SEWeP: Using Site Semantics and a Taxonomy to Enhance the Web Personalization Process", in Proc. of the 9th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD2003), pp. 99-108, August 2003, Washington DC
- J. Vlahakis, M. Eirinaki, and S.S. Anand. "IKUM: An Integrated Web Personalization Platform Based on Content Structures and Usage Behaviour", in Proc. of the Workshop on Intelligent Techniques for Web Personalization (ITWP'03), August 2003, Acapuclo, Mexico
- M. Eirinaki, H. Lampos, M. Vazirgiannis, and I. Varlamis. "SEWeP: Using Site Semantics and a Taxonomy to Enhance the Web Personalization Process", in Proc. of the 2nd Hellenic Data Management Symposium (HDMS 2003), September 2003, Athens, Greece

# **Book Chapters**

• (\*) I. Varlamis, M. Eirinaki, M. Louta, "Application of social network metrics to a trust-aware collaborative model for generating personalized user recommendations", (peer-reviewed) book chapter in "The Influence of Technology on Social Network Analysis and Mining", eds. Tansel Ozyer et. al., Lecture Notes in Social Networks (ISBN 978-3-7091-1345-5), pp. 49-74, Springer 2013

- M. Eirinaki, D. Mavroeidis, G. Tsatsaronis, and M. Vazirgiannis. "Introducing Semantics in Web Personalization: The role of Ontologies", book chapter in "Semantics, Web, and Mining", eds. M. Ackermann, B. Berendt, M. Grobelnik, A. Hotho, D. Mladenic, G. Semeraro, M. Spiliopoulou, G. Stumme, V. Svatek, M. van Someren, LNCS 4289/2006, pp. 147-162, Springer 2006
- M. Eirinaki, M. Vazirgiannis, "Web Mining", book chapter (online) in "AI Research in Greece", editor George Vouros, published by the Hellenic Artificial Intelligence Society (EETN), 2005
- M. Eirinaki, Y. Vlachakis, and S.S.Anand. "IKUM: An Integrated Web Personalization Platform Based on Content Structures and User Behavior", (peer reviewed) book chapter in "Intelligent Techniques in Web Personalization", eds. B. Mobasher, S.S. Anand, LNCS 3169/2005, pp.272-288, Springer 2005

#### **Tutorials**

 M. Eirinaki and M. Vazirgiannis. "Web Mining for Web Personalization", Tutorial, in the 16th European Conference on Machine Learning and the 9th European Conference on Principles and Practice of Knowledge Discovery in Databases (ECML/PKDD 2005), October 2005, Porto, Portugal

# **Keynotes & Invited Presentations**

- "Beyond Collaborative Filtering: Multimodal Approaches in Recommender Systems", presentation, ECE Dept. seminar,
   University of Texas San Antonio, November 2025
- "Hyperpersonalization through data", presentation to MBA student delegation from the University of Applied Sciences and Arts Northwestern Switzerland, International Gateways, SJSU, May 2025
- "Beyond Collaborative Filtering: Multimodal Approaches in Recommender Systems", presentation, ECE Dept. seminar,
   Santa Clara University, February 2025
- "Hyperpersonalization through data", presentation to MBA student delegation from the University of Applied Sciences and Arts Northwestern Switzerland, International Gateways, SJSU, May 2024
- AI Futures Forum, presentation and panel discussion, SJSU, San Jose, CA, April 2024
- "AI for Health Equity", presentation, Bridging the Gap: Engineering and Health Sciences for Equity, SJSU, San Jose CA, March 2024
- "Recommender Systems: the good, the bad, and the ugly", presentation, RSCA in 5', SJSU, San Jose CA, October 2023
- \* "Recommender Systems: Methods, Challenges, and Opportunities", Keynote, 5th Summit on Gender Equality in Computing (GEC'23), Athens, Greece, July 2023
- "Recommendations in the age of social networking", presentation, State of AI and ML (ValleyML 2020), Santa Clara CA, January 2020
- "With a little help from my friends (and their friends): Influence neighborhoods for social recommendations", 17th Hellenic Data Management Symposium (HDMS 2019), Athens, Greece, July 2019
- "Harnessing unstructured data to improve everyday life", guest lecture, Graduate School of Natural Science and Technology, Okayama University, Japan, September 2017
- "Machine Learning and Big Data for Smart Cities: Issues, Solutions, and Challenges in San Jose, CA", panel presentation, Okayama Information & Communication Symposium on Big Data and Cybersecurity to Create Advanced ICT Society, Okayama, Japan, September 2017
- "Social Recommendations for Personalized Fitness Assistance", presentation, Okayama Information & Communication Symposium on Big Data and Cybersecurity to Create Advanced ICT Society, Okayama, Japan, September 2017
- "Using Social Data for Personalizing Review Rankings", Service Innovation Discovery Summit: Data Science Meets Customer Experience, June 2015, Santa Clara, CA
- "QueRIE: Collaborative Database Exploration", 12th Hellenic Data Management Symposium (HDMS 2014), Athens, Greece, July 2014
- "Personal vs. Social", Panel presentation, 4th International Workshop on Personalized Access, Profile Management, and Context Awareness in Databases (PersDB 2010), September 2010, Singapore
- "Data Mining for Business Intelligence", Emerging Technologies in Software Engineering seminar, SJSU MBA/MS in Software Engineering Program, May 2008

- "New Approaches to Web Personalization", Information Retrieval and Knowledge Management seminar, Technology and Information Management (TIM) department, University of California Santa Cruz, January 2006
- "Ontologies in Web Personalization", invited talk (co-presented with M. Vazirgiannis), 2nd International Workshop on Knowledge Discovery and Ontologies (KDO-2005), October 2005, Porto, Portugal
- "SEWeP: Using Site Semantics and a Taxonomy to Enhance the Web Personalization Process", 2nd Hellenic Data Management Symposium (HDMS 2003), September 2003, Athens, Greece

# **University Service**

- Associate Chair of Graduate Affairs, Computer Engineering Department, Fall 2025 now
- Program Director/Academic Coordinator of SJSU MS in Artificial Intelligence, College of Engineering, Spring 2020 Spring 2025
  - Helped design and develop the curriculum for the MS in AI program
  - Responsible for admissions, advising, and curriculum coordination and development
- Associate Chair, Computer Engineering Department, Fall 2018 Fall 2022
  - o Responsible for assessment of BS CMPE, BS SE, MS CMPE and MS SE programs (until Fall 2020)
  - o Responsible for part-time lecturer evaluations (until Fall 2021)
  - o Coordinator of the data science curriculum (MS SE, MS CMPE, MS AI)
  - o Substituted Chair in meetings when unavailable
- ABET Assessment Coordinator, Computer Engineering Department, Fall 2014 Fall 2020
- Member of various University, College, and Department committees, Fall 2007 now
  - Currently serving as the Chair of the Graduate Curriculum committee, and member of the CMPE RTP, faculty search, planning and procedures committees, the Designated Advisors' college committee, as well as several other ad-hoc committees. Previous years omitted due to space limitations.
- MS project advisor for >250 students, MS thesis advisor for 16 students, MS thesis committee for 27 students, External PhD committee member/examiner for 12 students

### **Professional Activities**

- Board of Administration of Harokopio University of Athens (external member, elected position): September 2024 August 2029
- General Chair: IEEE BigDataService 2024, IEEE BigDataService 2023, IEEE BigDataService 2022, CDSIA (2011-2015)
- Program Committee Chair: ACM RecSys 2023 (Reproducibility), TheWebConf 2021 (Web Mining and Content Analysis), IE 2021 (short paper track), PAIW 2022, IEEE BigDataService 2020, Smart City Big Data 2019 (@IEEE BigDataService 2019), Big Data Applications for Smart Cities (BDASC) 2017 (@IEEE SCI 2017), Smart City Big Data 2017 (@IEEE BigDataService 2017), DESWeb 2017 (@IEEE ICDE 2017), PersDB 2012 (@VLDB 2012)
- Reproducibility Chair: ACM RecSys 2023
- Web Chair: IEEE ICDE 2021
- PhD track Chair: DSAA 2021
- Track Chair: SPECTS 2019, IEEE BigDataService 2016, IEEE BigDataService 2015
- Registration Chair: IEEE SOSE 2013
- Publicity co-Chair: ICISTM 2012
- Steering Committee member: Silicon Valley Women in Engineering (SV WiE 2019 2024)
- Accreditation reviewer, Hellenic Quality Assurance and Accreditation Agency (HQA/AΔΙΠ) (2018 2020)
- Senior Program Committee Member: WebConf (WWW) 2026, ACM RecSys 2026, ACM WSDM 2025, ACM WSDM 2024, WebConf (WWW) 2024, ACM WSDM 2023, TheWebConf 2023
- Program Committee Member: ACM RecSys 2025, CS CSU 2025, IEEE CAI 2025, ACM SIGIR 2024, CS CSU 2024, IEEE Big Data 2023, IEEE Big Data 2022, ACM RecSys 2022, ACM SIGIR 2022, EI 2022, ACM RecSys 2021, DSAA 2021, IEEE Big Data 2020, ACM RecSys 2020, DSAA 2020, Graph Computing 2020, Data Analytics 2020, SEKE 2020, ACM RecSys 2019, IEEE Big Data 2019, Graph Computing 2019, SOSE 2019, SPECTS 2019, MASTER@PKDD 2019, QAUCA 2019, IDEAS 2019, IEEE BigDataService 2019, IEEE Big Data 2018, CIKM 2018, ICDE 2018 (student travel awards), IEEE

BigDataService 2018, SEKE 2018, DOLAP 2018, IEEE SCI 2017, IEEE Big Data 2017, MLRec 2017, IEEE BigDataService 2017, SCSN 2017, SEKE 2017, DOLAP 2017, IEEE Big Data 2016 (Special session Intelligent Mining), SOMERIS 2016, SEKE 2016, DESWeb 2016, SCSN 2016, IEEE CMS 2015, SEKE 2015, CIKM 2014, IEEE Big Data 2014, SEKE 2014, IEEE IISA 2014, IEEE Big Data 2013, SEKE 2013, KEOD 2013, IC3 2013, SEKE 2012, SOTICS 2012, SCA 2011, ICDE 2011, ICISTM 2011, IC3 2011, KEOD 2011, SEDE 2011, SEKE 2011, SOTICS 2011, INCoS 2010, KEOD 2010, IC3 2010, WMCS 2010, SEKE 2010, INCoS 2009, MSODA 2008, WMCS 2008, ACM WIDM 2007, SWIG 2006

- Guest Editor (Special Issues):
  - Future Generation Computer Systems (Elsevier), special issue on "Big Data Computing Service and Machine Learning Applications" (2023-2025)
  - Intl. J. of Data Science and Analytics (Springer), special issue on "Mobile and Big Data Services on the Edge and the Cloud" (2021)
  - o Big Data Research (Elsevier), special issue on "Big Data and Smart Cities" (2019)
  - Intl. J. of Distributed Sensor Networks (Sage), special issue on "Smart Cities and Connected and Autonomous Vehicles Exploiting Distributed Sensor Networks" (2018)
  - Future Generation Computer Systems (Elsevier), special issue on "Recommender Systems for Large-Scale Social Networks" (2016)
  - o Intl. J. of Big Data Intelligence, special issue on "Big Data Intelligence and Knowledge Engineering" (2015)
- Associate Editor: Frontiers in Big Data (Recommender systems) (Dec 2022-now)
- Editorial board member: Big Data and Cognitive Computing J. (2021 now), Springer series on Advances in Learning, Analytics, and Intelligent Computing Systems (2016)
- Reviewer:
  - Journals: ACM Trans. on Recommender Systems (TORS). ACM Trans. on Web (TWEB), IEEE Trans. On Knowledge and Data Engineering (TKDE), Mathematics, Data and Knowledge Engineering (DKE), IEEE Access, Big Data Research, ACM Computing Surveys, Evolving Systems (Springer), IEEE Communications, Elsevier FGCS, IPL, ACM TOIT, ACM TKDD, IJIIDS, Online Information Review, ACM JDIQ, INS, SNAM, CACM, JIIS, JOPT, JODS, IJCA, CLSS, COMLAN, IJITDM, Frontiers of Information Technology & Electronic Engineering
  - Conferences and Workshops: ICDM 2008, ICDM 2007, KDD 2007, WIDM 2006, KDD 2006, MDM 2006, SAC 2006, ICDM 2005, ER 2005, WI 2005, ICEIS 2005
  - o Books: The Handbook of Technology Management

#### Awards and Distinctions

2025: Best paper award, IEEE BDS 2025

2023: Distinguished Faculty Mentor Award (SJSU) / My students J. Guzman (Medel) and S. Gupta won 2<sup>nd</sup> place in the California State University RSCA competition in the Engineering and Computer Science category (finalists at the COE and SJSU student research competition) for their work on using AI for stroke diagnosis.

2023: Best paper award, SVCC 2023

2022: Distinguished Faculty Mentor Award (SJSU) / My student R. Campbell was a finalist at the COE, the SJSU, and the CSU (state-wide) student research competition for his work on using multiagent reinforcement learning and self-play for cybersecurity defense.

2020: Distinguished Faculty Mentor Award (SJSU) / My students J. Lu, A. Mangune, and N. T. Saunshi were finalists at the COE, the SJSU, and the CSU (state-wide) Student Research Competitions for their work on DNS analytics

2019-2024: SJSU Faculty RSCA (Research and Creative Activity) Assigned Program Award

2019: Newnan Brothers Award for Faculty Excellence (COE/SJSU)

2019: Distinguished Faculty Mentor Award (SJSU) / My student A. Gulati was a finalist at the COE, the SJSU, and the CSU (state-wide) Student Research Competitions for her work on social recommender systems.

2017: Applied Materials Award for Excellence in Teaching (COE/SJSU)

2015: Distinguished Faculty Mentor Award (SJSU)/My team was awarded the best student award at the COE Student Research Competition, and were finalists at the CSU Student Research Competition

2013: My team was awarded the best student award at COE Student Research Competition.

- 2003: ACM KDD Student Award
- 1997: National Scholarship Foundation of Greece (IKY): Award for academic excellence
- 1996: National Scholarship Foundation of Greece (IKY): Award for academic excellence
- 1996: National Scholarship Foundation of Greece (IKY): Best student award
- 1995-1999: University of Piraeus: Awards for academic excellence (for each academic year of studies)

### **Grants and Research Gifts**

- 2025: CAHSI-Google Institutional Research Program (co-PI \$100,000)
- 2025: California Learning Lab AI FAST (co-PI \$150,000)
- 2024: NSF EES (co-PI \$200,000)
- 2024: CAHSI-Google Institutional Research Program (co-PI \$100,000)
- 2024: IBM SkillsBuild program cloud credit (PI \$50,000)
- 2024: EU Horizon/Marie Skolodowska Curie Actions (international partner €694,600)
- 2023/24: University Grants Academy Research Clusters (\$7000)
- 2022: COE Professional Faculty Development grant
- 2020: COE Professional Faculty Development grant
- 2019: Infoblox Research gift (PI \$240,000)
- 2018: COE Professional Faculty Development grant
- 2017: COE Professional Faculty Development grant
- 2015: COE Faculty mini grant for Support of Student Research Scholars (\$7200)
- 2015: COE Professional Faculty Development grant
- 2014: TCL Research Research gift (co-PI \$200,000)
- 2014: Textbook Alternative Project grant (PI \$1000)
- 2013-2015: Amazon's AWS in Education Grant Awards (AY 2013-14, 2015-16)
- 2011-2015: NSF TRUST (co-PI, award # CCF-0424422)
- 2011: CSU Research Fund Award (RSCA) (Spring-Summer 2012)
- 2011: COE Jr. Professorship Award (AY 2011 2012)
- 2010: CSU Research Fund Award (RSCA) (AY 2010-2011)
- 2008: COE Faculty Development Award (AY 2008-2009)
- 1999: National Scholarship Foundation of Greece (IKY): Scholarship for postgraduate studies in the foreign (through examination process)