

Curriculum Vitae of Ioannis Kavakiotis

Personal Information

Name:	Ioannis Kavakiotis
Place / Date of Birth:	Thessaloniki, 26 th of May, 1984
Nationality:	Greek
Military Obligation:	Fulfilled. Pvt Research & Informatics, 05/2015 - 02/2016
Phone:	+306947682706
e-mail:	ikavakiotis@gmail.com
Website:	www.ikavakiotis.gr

Current profile and position

Until recently, I was the head of “Biomedical Data Science and Bioinformatics” unit at the Department of Molecular Biology and Genetics, Democritus University of Thrace. Moreover, I work as a freelancer data scientist undertaking the design, development and implementation of machine learning systems for a range of clients across multiple domains.

I hold a PhD degree (2016) in Machine Learning and Knowledge Discovery from Biological and Biomedical Data. I also hold a BS degree in Informatics (2008) and three MS degrees - the first in Information Systems (School of Informatics, AUTH, 2010), the second in Applied Genetics and Biotechnology (School of Biology, AUTH, 2015) and the third in Medical Informatics (School of Medicine, AUTH, 2020).

During my research career, I have been awarded four fellowships (Stavros Niarchos Foundation (SNF), State Scholarships Foundation (IKY), Hellenic Artificial Intelligence Society (EETN) and Research Committee of Aristotle University of Thessaloniki). I have published 5 Thesis, 18 Journals, 2 Editorials, 3 Book chapters, 4 Papers in Conference Proceedings and 21 Abstracts in Conference Proceedings and I have more than 2300 citations according to google scholar and h-index 12.

My research interests are focused in Machine Learning and Data Mining methods specialized for Biological and Biomedical data and I have worked as a data scientist in several EU and National funded projects.

Professional Experience

Date:	07/2021 – 8/2023
Institution:	The Department of Molecular Biology and Genetics, Democritus University of Thrace.
Project:	Integrated Technologies in biomedical research: multilevel biomarker analysis in Thrace
Project Description - Role:	Head of the “Biomedical Data Science and Bioinformatics” Unit
Date:	12/2020 – 06/2021
Institution:	Department of Computer Science and Biomedical Informatics. University of Thessaly.

Project:	A platform for computational meta-analysis of Genome Wide Association Studies-GWAS
Project Description - Role:	Postdoctoral researcher. SNP discovery in non -coding RNA transcription sites
Date:	12/2017 – 11/2020
Institution:	Department of Computer Science and Biomedical Informatics. University of Thessaly.
Project:	From Argonauts to microRNAs: A Computational and Experimental Approach Fellowship funded by Stavros Niarchos Foundation
Project Description – Role:	Postdoctoral researcher. Machine learning algorithms and database development for the analysis of microRNA expression.
Date:	02/2018 – 7/2020
Institution:	Department of Computer Science and Biomedical Informatics. University of Thessaly.
Project:	ELIXIR-GR: The Greek research infrastructure for the management and analysis of data in life sciences. ELIXIR-GR is the Greek National Node of the ESFRI European RI ELIXIR, a distributed e-Infrastructure aiming at the construction of a sustainable European infrastructure for biological information.
Role in the Project:	Postdoctoral researcher. Participation in updating and upgrading state-of-the-art tools and databases for the analysis and interpretation of non-coding RNA targets and their transcriptional regulation.
Date:	11/2016 – 08/2017
Institution:	School of Biology, Aristotle University of Thessaloniki
Project:	Development of Machine Learning Algorithms for Genetic Marker Selection in High Dimensional Next Generation Sequencing Population Genomic Data for Environmental Protection. IKY Fellowships of Excellence for Postgraduate Studies in Greece - Siemens Program. Specialization: Machine Learning.
Role in the Project:	Postdoctoral researcher. Development of machine learning algorithms for the analysis of Next Generation Sequencing Data
Date:	03/2016 – 04/2017
Institution:	Institute of Applied Biosciences (INAB)/ The Centre for Research & Technology, Hellas (CERTH) and Medical School, Aristotle University of Thessaloniki
Project:	AEGLE: An analytics framework for integrated and personalized healthcare services in Europe. (Horizon 2020)
Role in the Project:	Postdoctoral researcher: Development of data mining techniques for the analysis of biological (immunogenetic) and biomedical data
Date:	01/2015 – 10/2015
Institution:	School of Biology, Aristotle University of Thessaloniki
Project:	AquaTrace: the development of tools for tracing and evaluating the genetic impact of fish from aquaculture. (FP7)
Role in the Project:	Researcher. Intelligent analysis of population genomic data (SNPs) through data mining techniques.

Education

Date:	2010 – 2016 (including 9-month military obligation)
Organization:	School of Informatics , Faculty of Sciences, Aristotle University of Thessaloniki
Title awarded:	Ph.D., Doctor of Philosophy in Artificial Intelligence. Grade: Excellent. Thesis Title: Machine Learning and Knowledge Discovery from Biological Data. Supervisor: Prof. I.Vlahavas.
Date:	2016 – 2020 (Postponed for one year 2017-2018)
Organization:	School of Medicine , Faculty of Health Sciences, Aristotle University of Thessaloniki
Title awarded:	M.Sc., Master of Science in Medical Informatics Overall grade: 8.85/10 Thesis Title: Methods for Biosignal Analysis and Modelling for the Investigation of the Effect of Metal-Ions in Compound Action Potential in Nervous Tissue. Supervisor: Prof. I. Chouvarda.
Date:	2012 – 2015
Organization:	School of Biology , Department of Genetics, Development and Molecular Biology, Faculty of Sciences, Aristotle University of Thessaloniki
Title awarded:	M.Sc., Master of Science in Applied Genetics and Biotechnology. Overall grade: 8.99/10 Thesis Title: Bioinformatics tool development for applications in population genetics. Supervisor: Prof. A. Triantafyllidis
Date:	2008 – 2010
Organization:	School of Informatics , Faculty of Sciences, Aristotle University of Thessaloniki
Title awarded:	M.Sc., Master of Science in Information Systems. Overall grade: 9.08/10 Thesis Title: Data Mining Methods for Polyadenylation Site Prediction in Biological Data. Supervisor: Prof. I.Vlahavas.
Date:	2002 – 2008
Organization:	School of Informatics , Faculty of Sciences, Aristotle University of Thessaloniki
Title awarded:	B.Sc., Bachelor of Science in Informatics Overall grade: 7.64/10 Specialization: Information Systems. Thesis: Polyadenylation Site Prediction. Supervisor: Prof. I.Vlahavas.

Awards and Distinctions

Stavros Niarchos Foundation Fellowship for Postgraduate Studies (2017-2020)

State Scholarships Foundation (IKY) Fellowships of Excellence for Postgraduate Studies in Greece - Siemens Program (2016 - 2017)

Specialization: Machine Learning.

Scholarship from the **Hellenic Artificial Intelligence Society (EETN)** for paper presentation in SETN2016 [PC.2]

Scholarship from the **Research Committee of Aristotle University of Thessaloniki** for Distinction during the 2nd year of the PhD studentship

Teaching Experience

Postgraduate Courses:

Computational Analysis of Biomolecules – Bioinformatics (Module Leader)
MSc in Biomedical Informatics. School of Medicine, Democritus University of Thrace & Athena Research Center (2022-2023)

Lectures: Machine Learning, Predictive models and Regression, Knowledge Graphs and Ontologies in Biosciences. MSc in Applied Bioinformatics and Data Analysis. Molecular Biology and Genetics, Democritus University of Thrace (2022-2023 - 6 hours)

Machine Learning (Course Assistant)
MSc in Applied Informatics. Department of Electrical and Computer Engineering. University of Thessaly (2018-2019 – 1 academic year. Prof. A. Hatzigeorgiou)

Advanced Topics in Artificial Intelligence (Course Assistant)
MSc in Science and Technology of ECE. Department of Electrical and Computer Engineering. University of Thessaly (2017-2019 – 2 academic years. Prof. A. Hatzigeorgiou)

Business Intelligence and Decision Support Systems (Course Assistant)
Joint postgraduate course: Informatics and Management Program. School of Informatics and School of Economic Sciences Aristotle University of Thessaloniki. (2010-2016 - 6 academic years. Prof: I. Vlachavas).

Undergraduate Courses:

Decision Support Theory and Systems (Course Assistant)
School of Informatics, Aristotle University of Thessaloniki. (2011-2014 - 3 academic years. Prof: I. Vlachavas)

Artificial Intelligence (Course Assistant)

	School of Informatics, Aristotle University of Thessaloniki. (2010-2012 - 2 academic years. Prof: I. Vlachavas)
Other courses:	Computer Science (Principal Instructor). Greek National School of Judges. (2009-2013 – 4 academic years)
M.Sc. Thesis co-supervision:	<p>Gerochristos I. “Establishing interoperability between Bioinformatics ontologies and Linked Data sources in the Semantic Web”. M,Sc. Thesis. School of Informatics, Aristotle University of Thessaloniki (Main Supervisor: Prof. N. Bassiliades), 2015</p> <p>Samaras P. “Frequent Pattern Mining for Informative Marker Selection in Population Genomic Data”. M,Sc. Thesis. School of Informatics, Aristotle University of Thessaloniki (Main Supervisor: Prof. I.Vlahavas), 2015</p> <p>Voulgaridis A. “Applying ontologies in Bioinformatics”. M,Sc. Thesis. School of Informatics, Aristotle University of Thessaloniki (Main Supervisor: Prof. N. Bassiliades), 2014</p> <p>Tsonidis G. “Knowledge discovery from medical data”. M.Sc. Thesis. School of Informatics, Aristotle University of Thessaloniki (Main Supervisor: Prof. I. Vlahavas), 2012</p>
B.Sc. Thesis co-supervision:	<p>Intzevidou K. “Feature Selection Methods for Biological Data”. B.Sc. Thesis. School of Informatics, Aristotle University of Thessaloniki (Main Supervisor: Prof. I. Vlahavas), 2017</p> <p>Bardos C. “Classification Algorithms For Population Genomic Datasets”. B.Sc. Thesis. School of Informatics, Aristotle University of Thessaloniki (Main Supervisor: Prof. I. Vlahavas), 2016</p> <p>Ntavidi C. “Rank aggregation methods for feature extraction from population genomic data”. B,Sc. Thesis. School of Informatics, Aristotle University of Thessaloniki (Main Supervisor: Prof. I. Vlahavas),2016</p> <p>Gavriilidis K. “Rank aggregation methods for data analysis”. B.Sc. Thesis. School of Informatics, Aristotle University of Thessaloniki (Main Supervisor: Prof. I. Vlahavas),2015</p> <p>Stylla N. “Delta method as split criterion in J48 for the classification of population genomics data”. B.Sc. Thesis. School of Informatics, Aristotle University of Thessaloniki (Main Supervisor: Prof. I. Vlahavas), 2014</p> <p>Ntelidou D. “Methods for dimensionality reduction of Sigle Nuclotide Polymorphisms (SNP) Datasets”. B.Sc. Thesis. School of Informatics, Aristotle University of Thessaloniki (Main Supervisor: Prof. I. Vlahavas), 2012</p> <p>Loizou A. “Knowledge discovery from miRNA sequences”. B.Sc. Thesis. School of Informatics, Aristotle University of Thessaloniki (Main Supervisor: Prof. I. Vlahavas), 2012</p> <p>Samaras P. and Voulgaridis A. “Bioinformatic Genome Analysis”. B.Sc. Thesis. School of Informatics, Aristotle University of Thessaloniki (Main Supervisor: Prof. I. Vlahavas), 2012</p>

Cont. Education

(selected)

Summer Schools:

1st Bioethics Summer Course of the Stavros Niarchos Foundation Bioethics Academy.

Organizer: Stavros Niarchos Foundation Bioethics Academy, Johns Hopkins Berman Institute of Bioethics, ETH Zurich Health Ethics and Policy Lab.
Duration: 20th - 22th of June 2019 (3-days).

Volos Summer School of Human Genetics 2018.

Organizer: Eleftheria Zeggini's Lab from Wellcome Sanger Institute and University of Thessaly. Duration: 25th-27th of May 2018 (3-days)

HAAIS – 1st Hellenic Artificial Intelligence Summer School.

Organizer: Hellenic Artificial Intelligence Society, the School of Informatics of the Aristotle University of Thessaloniki and International Hellenic University.
Duration: 24th - 27th of August, 2009 (4-days)

Seminars:

Bioinformatics Roadshow Thessaloniki.

Organizer: European Molecular Biology Laboratory – European Bioinformatics Institute (EMBL – EBI) and School of Biology of the Aristotle University of Thessaloniki. Duration: 7th-9th of February, 2012 (3-days)

Research Proposal Authoring Seminar.

Organizer Research Committee of Aristotle University of Thessaloniki. Duration: 10th - 14th of October, 2011 (5-days)

Certificates:

Neural Networks and Deep Learning. (2020). deeplearning.ai. Coursera Verified Certificate.

Improving Deep Neural Networks: Hyperparameter tuning, Regularization and Optimization. (2020). deeplearning.ai. Coursera Verified Certificate.

Structuring Machine Learning Projects. (2020). deeplearning.ai. Coursera Verified Certificate.

R programming. (2015). Department of Biostatistics, Johns Hopkins Bloomberg School of Public Health. Coursera Verified Certificate.

The Data Scientist's Toolbox. (2015). Department of Biostatistics, Johns Hopkins Bloomberg School of Public Health. Coursera Verified Certificate.

Scientific Activities

Conference Organization:	<p>ECCB 2020 - The 19th European Conference on Computational Biology. Sitges, Spain, September 5-9, 2018 Role: Member of the Organizing Committee [E.2]</p> <p>ECCB 2018 - The 17th European Conference on Computational Biology. Stavros Niarchos Foundation Cultural Center (SNFCC), Athens, Greece, September 8-12, 2018 Role: Local Organizing Committee Co-chair [E.1]</p> <p>HSCBB17 - The 12th Conference of the Hellenic Society for Computational Biology and Bioinformatics. Hellenic Pasteur Institute, Athens, Greece, 11-13 October 2017. Role: Member of the Local Organizing Committee</p> <p>4th Hellenic Pasteur Institute Postgraduate and Postdoctoral Meeting. Role: Member of the Organizing Committee</p>
Conference Program Committee:	<p>ISMCO 2021 - 3rd International Symposium on Mathematical and Computational Oncology. Role: Program Committee Member</p> <p>ISMCO 2020 - 2nd International Symposium on Mathematical and Computational Oncology. Role: Program Committee Member</p> <p>ISMCO 2019 - 1st International Symposium on Mathematical and Computational Oncology. Role: Program Committee Member</p>
Conference Session Chair:	<p>ECCB 2018 - The 17th European Conference on Computational Biology. Stavros Niarchos Foundation Cultural Center (SNFCC), Athens, Greece, September 8-12, 2018 Role: Genes Session Chair</p> <p>3rd Hellenic Pasteur Institute Postgraduate and Postdoctoral Meeting. Role: Bioinformatics Session Chair</p>
Scientific Organization Memberships:	<p>Hellenic Artificial Intelligence Society Hellenic Society for Computational Biology and Bioinformatics International Society for Computational Biology</p>
Reviewer - Journals:	<p>The Lancet Diabetes and Endocrinology (Elsevier) Machine Learning (Springer) Scientific Reports (Nature) PLOS ONE (Public Library of Science)</p>

	<p>PLOS Medicine (Public Library of Science) Bioinformatics (Oxford University Press) BMC Bioinformatics (BioMed Central) Journal of Biomedical and Health Informatics (IEEE) BMC Medical Informatics and Decision Making (BioMed Central) Computational and Structural Biotechnology Journal (Elsevier) Computer Methods and Programs in Biomedicine (Elsevier) Artificial Intelligence in Medicine (Elsevier) Transactions on Knowledge and Data Engineering (IEEE) Artificial Intelligence Review (Springer) Artificial Intelligence in Medicine (Elsevier) Sensors Letters (IEEE) Sensors (MDPI) Analytical and Bioanalytical Chemistry (Springer) Journal of Biological Research-Thessaloniki (BioMed Central) International Journal on Artificial Intelligence Tools (World Scientific) PeerJ (PeerJ) Computers and Electronics in Agriculture (Elsevier)</p>
Reviewer – Conferences:	<p>8th & 9th Hellenic Conference on Artificial Intelligence 17th & 19th European Conference on Computational Biology 1st & 2nd International Symposium on Mathematical and Computational Oncology (ISMCO) 24th International Conference on Pattern Recognition 44th & 45th 45th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)</p>
Reviewer – Organizations:	<p>Deutsche Forschungsgemeinschaft (German Research Foundation) Katholieke Universiteit Leuven, Belgium American University of Sharjah, United Arab Emirates. King's College London, UK Elsevier B.V. Information and Analytics Company.</p>

Programming Languages and Tools

Machine learning. Data mining, Data analysis:	<p><i>Programming languages utilized in data mining and machine learning projects and the corresponding projects</i> Python [T5, T4, J12, J5, J4, PC4] Java [T3, T2, T1, J11, J5, J1, PC3, PC2, PC1] R [J3, J2, PC4]</p>
Web application dev.:	<p>Application Layer - Frontend: Typescript, Angular 9 [C.21, J.16, J.17, J18] Data access layer - Backend: PHP, Laravel 7 [C.21, J.16, J.17, J18]</p>

Relational Database: SQL, MySQL, PostgreSQL [J.16, J.17]
NoSQL Database: MongoDB [C.21, J18]

Languages

Mother tongue

Greek

Other languages

English. Proficiency, Edexcel, University of Westminster
Understanding: Listening: C2, Reading: C2
Speaking: Spoken interaction: C2, Spoken production: C2
Writing: C2

German. Grundstufe, Goethe Institute
Understanding: Listening: B1, Reading: B1
Speaking: Spoken interaction: B1, Spoken production: B1
Writing: B1

Publications

Summary: 5 Thesis, 18 Journals, 2 Editorials, 3 Book chapters, 4 Papers in Conference Proceedings and 31 Abstracts in Conference Proceedings.

First author: 10 Papers (6 Journals, 2 Book Chapters, 2 Papers in Conference Proceedings)

Citations: 2198 citations – H-index: 12 (Google Scholar)

Notes: Two journal articles [J.10] and [J.12] rank in the top 1% by citations (Highly Cited) for 2019 for the field Biology and Biochemistry in Web of Science.

Thesis

[T.5] **Kavakiotis I.** “Methods for Biosignal Analysis and Modelling for the Investigation of the Effect of Metal-Ions in Compound Action Potential in Nervous Tissue”. M.Sc. Thesis. School of Medicine, Aristotle University of Thessaloniki, 2020 (in Greek)

[T.4] **Kavakiotis I.** “Machine Learning and Knowledge Discovery from Biological Data”. PhD Thesis. School of Informatics, Aristotle University of Thessaloniki, 2016 (in Greek)

[T.3] **Kavakiotis I.** “Bioinformatics tool development for applications in population genetics”. M.Sc. Thesis. School of Biology, Aristotle University of Thessaloniki, 2015 (in Greek)

[T.2] **Kavakiotis I.** “Data Mining Methods for Polyadenylation Site Prediction in Biological Data”. M.Sc. Thesis. School of Informatics, Aristotle University of Thessaloniki, 2010 (in Greek)

[T.1] **Kavakiotis I.** “Polyadenylation Site Prediction” B.Sc. Thesis. School of Informatics, Aristotle University of Thessaloniki, 2008 (in Greek)

Editorials

[E.2] Capella-Gutierrez S., Alloza E., Gallastegui E., **Kavakiotis I.**, Harrow J., Langtry A., ECCB2020 Steering Committee & Valencia, A. (2020). ECCB2020: the 19th European Conference on Computational Biology, Bioinformatics, Volume 36, Issue Supplement_2, December 2020, Pages i569–i572

[E.1] ECCB 2018 Steering Committee, Hatzigeorgiou AG., Bagos P., Benos PV., Nikolaou C., Moreau Y., **Kavakiotis I.** (2018) ECCB 2018: The 17th European Conference on Computational Biology. Bioinformatics. 2018 Sep 1;34(17):i595-8.

Book Chapters

[BC.3] Tsave O., **Kavakiotis I.** (2020) Biomarkers and Machine Learning Applications in Obesity. In: Faintuch J., Faintuch S. (eds) Obesity and Diabetes. Springer, Cham. https://doi.org/10.1007/978-3-030-53370-0_65

[BC.2] **Kavakiotis I.**, Tzanis, G., Vlahavas, I., (2014) Mining Frequent Patterns and Association Rules from Biological Data. Biological Knowledge Discovery Handbook: Preprocessing, Mining and Postprocessing of Biological Data, M. Elloumi, A. Y. Zomaya (Eds.), Wiley Book Series on Bioinformatics: Computational Techniques and Engineering, Wiley-Blackwell, John Wiley & Sons Ltd., New Jersey, USA (Publish.) <https://doi.org/10.1002/9781118617151.ch34>

[BC.1] **Kavakiotis, I.**, Tzanis, G., Vlahavas, I., (2014) Polyadenylation site prediction using PolyA-iEP method Polyadenylation Method and Protocols, Joanna Rorbach and Agnieszka Bobrowicz (Eds.), Springer, Methods In Molecular Biology, 1125, pp. 131-140, 2014 https://doi.org/10.1007/978-1-62703-971-0_11

Journals (* indicate papers (#2) that rank in the top 1% by citations (Highly Cited) for 2019 for the field Biology and Biochemistry in Web of Science)

[J.18] **Kavakiotis, I.**, Alexiou, A., Tastsoglou, S., Vlachos, I. S., & Hatzigeorgiou, A. G. (2021). DIANA-miTED: a microRNA tissue expression database. Nucleic Acids Research, <https://doi.org/10.1093/nar/gkab733> (IF (2021) - 19.160)

[J.17] Tastsoglou, S., Miliotis, M., **Kavakiotis, I.**, Alexiou, A., Gkotsi, E. C., Lambropoulou, A., Lygnos, V., Kotsira, V., Maroulis, V., Zisis, D., Skoufos, G., & Hatzigeorgiou, A. G. (2021). PlasmiR: A Manual Collection of Circulating microRNAs of Prognostic and Diagnostic Value. Cancers, 13(15), 3680. <https://doi.org/10.3390/cancers13153680> (IF (cur.) - 6.639)

[J.16] Skoufos G., Kardaras F.S., Alexiou A., **Kavakiotis I.**, Lambropoulou A., Kotsira V., Tastsoglou S., Hatzigeorgiou A.G., (2020) Peryton: a manual collection of experimentally supported microbe-disease associations, Nucleic Acids Research, , gkaa902, <https://doi.org/10.1093/nar/gkaa902> (IF (2020) - 16.971)

[J.15] Alexiou A., Zisis D., **Kavakiotis I.**, Miliotis M., Koussounadis A., Karagkouni D., & Hatzigeorgiou AG. (2021). DIANA-mAP: Analyzing miRNA from Raw NGS Data to Quantification. Genes, 12(1),46. (IF (cur) - 3.759)

[J.14] Perdikopanis N., Georgakilas KG., Grigoriadis D, Pierros V., **Kavakiotis I.**, Alexiou P., Hatzigeorgiou A., DIANA-miRGen v4: indexing promoters and regulators for more than 1500 microRNAs, Nucleic Acids Research, , gkaa1060, <https://doi.org/10.1093/nar/gkaa1060> (IF (2020) - 16.971)

[J.13] Tsave O., **Kavakiotis I.**, Kantelis K., Mavridopoulos S., Nicopolitidis P., Papadimitriou G., Vlahavas I., Salifoglou A. (2019) The anatomy of bacteria-inspired nanonetworks: Molecular nanomachines in message dissemination. Nano Communication Networks. 2019 May 10. <https://doi.org/10.1016/j.nancom.2019.05.001> (IF (2019) - 2.621)

[J.12*] Karagkouni D., Paraskevopoulou MD., ChatzopoulosS., Vlachos IS., Tastsoglou S., Kanellos I., Papadimitriou D., **Kavakiotis I.**, Maniou S., Skoufos G., (...), Hatzigeorgiou A. (2017) DIANA-TarBasev8: a decade-long collection of experimentally supported miRNA-gene interactions. Nucleic Acids Research, <https://doi.org/10.1093/nar/gkx1141>. (IF (2018) - 11.147) - (Highly cited)

[J.11] **Kavakiotis I.**, Samaras P., Triantafyllidis A., Vlahavas I. (2017) FIFS: A data mining method for informative marker selection in high dimensional population genomic data. Computers in Biology and Medicine. 90: 146-154. <https://doi.org/10.1016/j.combiomed.2017.09.020> (IF (2017) - 2.115)

[J.10*] **Kavakiotis, I.**, Tsave, O., Salifoglou, A., Maglaveras, N., Vlahavas, I., Chouvarda, I. (2017). Machine Learning and Knowledge Discovery Methods in Diabetes Research. Computational and Structural Biotechnology Journal, Volume 15, 2017, Pages 104-116. <https://doi.org/10.1016/j.csbj.2016.12.005> (IF (2017) - 4.148) - (Highly cited)

[J.09] Xochelli A., Baliakas P., **Kavakiotis I.**, Agathangelidis A., Sutton LA., Minga E., (...), Stamatopoulos K.(2017). Chronic lymphocytic leukemia with mutated IGHV4-34 receptors: shared and distinct immunogenetic features and clinical outcomes. Clinical Cancer Research. 2017 Sep 1;23(17):5292-5301. <https://doi.org/10.1158/1078-0432.CCR-16-3100>. Epub 2017 May 23. (IF (2017) - 10.199)

- [J.08] Mavridopoulos S., Nicopolitidis P., Tsave O., **Kavakiotis I.**, Salifoglou A. (2017) Using bacterial concentration as means of dissipating information through chemotaxis. *Nano Communication Networks*. <http://doi.org/10.1016/j.nancom.2017.04.002> (IF (2017) - 2.070)
- [J.07] Kantelis K., Papadimitriou G., Nikopolitidis P., **Kavakiotis I.**, Tsave O., Salifoglou A. (2017). Fick's Law Model Revisited: A New Approach to Modeling Multiple Sources Message Dissemination in Bacterial Communication Nanosystems. *IEEE Transactions on Molecular, Biological and Multi-Scale Communications*. Volume: PP, Issue: 99. 20 June 2017. <http://doi.org/10.1109/TMBMC.2017.2717402>
- [J.06] **Kavakiotis, I.**, Xochelli, A., Agathangelidis, A., Tsoumakas, G., Maglaveras, N., Stamatopoulos, K., Hadzidimitriou, A., Vlahavas, I., Chouvarda, I. (2016) Integrating Multiple Immunogenetic Data Sources For Feature Extraction and Mining Mutation Patterns: The Case of Chronic Lymphocytic Leukemia Shared Mutations *BMC Bioinformatics*;17 Suppl 5:173. <http://doi.org/10.1186/s12859-016-1044-3>. (IF (2016) - 2.448)
- [J.05] **Kavakiotis I.**, Triantafyllidis A., Ntelidou D, Alexandri P, Megens HJ, Crooijmans RP, Groenen MA, Tsoumakas G, Vlahavas I. (2015) "TRES: Identification of Discriminatory and Informative SNPs from Population Genomic Data.", *Journal of Heredity*, Wiley, 2015 2015 Sep-Oct;106(5): 672-6. <http://doi.org/10.1093/jhered/esv044> (IF (2015) - 2.075)
- [J.04] Xochelli, A., Agathangelidis, A., **Kavakiotis, I.**, Minga, E., Sutton, L.A., Baliakas, P., (...) Stamatopoulos, K.(2015) Immunoglobulin Heavy Variable (IGHV) Genes and Alleles: New Entities, New Names and Implications for Research and Prognostication in Chronic Lymphocytic Leukemia, *Immunogenetics*, Springer, Springer, 2015 Jan;67(1):61-6. <http://doi.org/10.1007/s00251-014-0812-3>. (IF (2015) - 2.303)
- [J.03] **Kavakiotis, I.**, Triantafyllidis, A., Samaras, P., Voulgaridis, A., Karaiskou, N., Konstantinidis, E., Vlahavas, I., (2014) Pattern discovery for microsatellite genome analysis, *Computers in Biology and Medicine*, Edward John Ciaccio (Ed.), Elsevier, Vol. 46, pp. 71-78 , 2014. <https://doi.org/10.1016/j.combiomed.2014.01.002> (IF (2014) - 1.240)
- [J.02] Karaiskou, N., Tsakogiannis, A., Gkagkavouzis, K., Operator of Parnitha National Park., Papika, S., Latsoudis, P., **Kavakiotis, I.**, Pantis, J., Abatzopoulos, TJ., Triantaphyllidis, C., Triantafyllidis, A. (2014) "Greece: A Balkan Subrefuge for a Remnant Red Deer (*Cervus Elaphus*) Population", *Journal of Heredity*, Wiley, 2014 May-Jun;105(3):334-44. <http://doi.org/10.1093/jhered/esu007>. Epub 2014 Feb 20. (IF (2014)- 2.088)
- [J.01] Tzani, G., **Kavakiotis, I.**, Vlahavas, I., "PolyA-iEP: A Data Mining Method for the Effective Prediction of Polyadenylation Sites", *Expert Systems with Applications*, Elsevier, 38(10): 12398-12408, 2011 <https://doi.org/10.1016/j.eswa.2011.04.019> (IF (2011) - 2.203).

Peer-reviewed Articles in Conference Proceedings

- [PC.04] Tsave O., **Kavakiotis I.**, Vlahavas I., Salifoglou A. (2018). Adipose Tissue as a Biomarker in Data Mining Predictive Models of Metabolic Pathophysiology. In: Maglaveras N., Chouvarda I., de Carvalho P. (eds) *Precision Medicine Powered by pHealth and Connected Health*. IFMBE Proceedings, vol 66. Springer, Singapore https://doi.org/10.1007/978-981-10-7419-6_18
- [PC.03] **Kavakiotis, I.**, Triantafyllidis, A., Tsoumakas, G., Vlahavas, I. Ensemble Feature Selection using Rank Aggregation Methods for Population Genomic Data, *ACM Proceedings of the 9th Hellenic Conference on Artificial Intelligence*, 22, 2016 <https://doi.org/10.1145/2903220.2903233>
- [PC.02] **Kavakiotis I.**, Triantafyllidis A., Tsoumakas G., Vlahavas I., (2014) Feature Evaluation Metrics for Population Genomic Data, *Proceedings of 8th Hellenic Conference on Artificial Intelligence (SETN 2014)*, A. Likas, K. Blekas and D. Kalles (Eds.), Springer, *Artificial intelligence: Methods and Applications*, LNCS, 8445, pp. 436-441, Ioannina, Greece, May 15-17, 2014, 2014 https://doi.org/10.1007/978-3-319-07064-3_36

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