Christos Diou

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Education

2005-2010 **PhD in Electrical and Computer Engineering**
Aristotle University of Thessaloniki
Thesis: "Semantic Analysis of Multimedia Data with Machine Learning". The thesis studies the problem of automated concept-based multimedia retrieval and proposes concept detector models based on cascades of classifiers and on audiovisual attribute extractors. Furthermore, the thesis proposes training concept detector models using clickthrough data collected from search engines.
Grade: Excellent

1999-2004 **Diploma in Electrical and Computer Engineering**
Aristotle University of Thessaloniki
Diploma thesis: "Controlling Complexity and Validity in Semantic Multimedia Search". The thesis presents and evaluates a set of algorithms for controlling complexity during semantic indexing of multimedia data.
Thesis grade: 10/10
Diploma grade: 8.35/10

Positions

2020-today **Assistant Professor**:
Department of Informatics and Telematics, Harokopio University of Athens, Greece

2013-2020 **Research fellow and adjunct professor**:
Multimedia Understanding Group, Information Processing Lab, Electrical and Computer Engineering Department, Aristotle University of Thessaloniki, Greece

2011-2013 **Postdoctoral researcher**:
Information Technologies Institute, Centre for Research and Technology Hellas,

Greece

2005-2011 **Research associate**:
Multimedia Understanding Group, Information Processing Lab, Electrical and Computer Engineering Department, Aristotle University of Thessaloniki, Greece

Research projects

2024-2028 **MELIORA: Multimodal Engagement and sustainable Lifestyle Interventions Optimizing breast cancer Risk reduction supported by Artificial intelligence**
Funding: European Commission, Horizon Europe
Role: Task leader for "Causal recommendation engine for delivering personalised awareness and education material"
R&D Activities: Development of a causal recommendation engine, capable of (a) delivering context-sensitive recommendations / interventions, targeting behavioral change to reduce the risk for breast cancer and (b) adapting recommendation models to individuals belonging to under-represented population groups.
Website: https://cordis.europa.eu/project/id/101136791

2023-2026
HumAIne: Hybrid Human-AI Decision Support for Enhanced Human Empowerment in Dynamic Situations.
Funding: European Commission, Horizon Europe
Role: Task leader for "Benchmarking Suite for Human-AI models"
R&D Activities: The team will be responsible for developing an innovative, automated Human-AI collaboration benchmark. The benchmark will include parametrised synthetic surrogate human agents, which will simulate multiple types of human users (at least 5 agent types for at least 5 tasks and datasets). The benchmark will be developed using tasks and open datasets which are relevant to the HumAIne pilots (manufacturing, smart cities, healthcare, finance, and energy).
Website: https://humaine-horizon.eu/

2023-2027 **BETTER4U: Preventing obesity through Biologically and bEhaviorally Tailored inTERventions for you**.
Funding: European Commission, Horizon Europe
Role: Development of the BETTER4U causal model
R&D Activities: Integration of diverse existing datasets including genetic and lifestyle data from over 1M individuals. Development of a causal model for weight gain using retrospectively collected data. Methods for addressing issues with missing data, low representation of population, and for identification of optimal behavioural change interventions taking into account individual compliance.
Website: https://cordis.europa.eu/project/id/101080117

2022-2026 **RELEVIUM: Improving quality of life of advanced pancreatic cancer patients through an AI-guided multimodal intervention, combining pain and cachexia management, nutrition, and physical activity**.
Funding: European Commission, Horizon Europe
Role: PI for HUA. Leader of WP1 "Analysis of needs and technology deployment", participation in tasks related to the development of AI-guided monitoring and decision-support tools
R&D Activities: The HUA team will (a) define the system specifications, and will coordinate the technology development and deployment, (b) lead the development of behavior monitoring tools related to the nutrition and physical activity of the patients, (c) support a feasibility and data collection study that will enable the development of innovative machine learning algorithms for pain and cachexia monitoring (d) will participate in the development of AI-based algorithms for early warning on patient deterioration. The tools that will be developed during the project will be part of a multi-modal intervention that will be evaluated in a multi-centre randomized controlled clinical trial involving 5 different countries.
Website: https://www.releviumproject.eu/

2021-2025 **REBECCA: REsearch on BrEast Cancer induced chronic conditions supported by Causal Analysis of multi-source data**. Develop technologies and methods to assess the safety and effectiveness of interventions as well as determinants of the quality of life of breast cancer patients using "real world data", i.e. data not collected for the purposes of clinical research. Pilot application in three populations in Norway, Spain and Sweden.
Funding: European Commission, Horizon 2020
Role: PI for HUA. Leader of WP4 "Causal inference and prediction using RWD"
R&D Activities: HUA will develop methods for causal modeling of observational real-world data to determine causal relations between clinical, psychological and patient-reported outcomes and interventions in breast cancer survivors. The focus is on the management of chronic conditions caused by cancer, the first line as well as the secondary treatment in breast cancer patients. Data include data from electronic health records, registry data and biobank data, data from wearable devices, self-reported data, physical and online behavior data, as well as environment data (including the urban, home and socioeconomic environments). The more general ambition is to develop methods for using such rich but noisy and diverse data sources in order to guide clinical and health policy decision in cases where Randomized Controlled Trials are hard or impossible (due to the inability to control all the variables, as well as due to financial and ethical reasons).
Website: https://rebeccaproject.eu/

2016-2021 **BigO: Big data against childhood obesity**. Development of population-level behaviour monitoring system for evidence-based policy decision support against childhood obesity.
Funding: European Commission, Horizon 2020 **Role:** Leader of work package "Analytics and visualisation engine" responsible for signal processing, big data analysis and visualisation. Served as the project's innovation manager. Responsible

for the design of the system architecture.
R&D Activities: Machine learning for behavioural indicator extraction from accelerometer, gyroscope and GPS signals from mobiles and smartwatches for eating (detect eating occurrences and in-meal bites), activity types, transportation mode, types of visited locations, sleep patterns. Development of behavioural profiles. Distances between behavioural profiles. Privacy-aware learning (centralised learning without collecting sensitive data from particpants). Model explainability for nonlinear models. Modelling of noise and uncertainty at the classifier level. Test error bounds for fuzzy SVMs. Development in python, scala (for Apache Spark) and Java (for web services).
Website: https://bigoprogram.eu/

2018-2020 **eeRIS: A household energy consumption information system**. Development of an electrical energy disaggregation system for detailed monitoring and feedback regarding electrical energy consumption in households.
Funding: Greek Secreteriat on Research and Technology **Role:** Part of the coordinating team (Power Systems Lab, ECE, AUTH). Development of a power disaggregation module that decomposes electrical installation-level active and reactive power measurements into the consumption of individual household appliances with minimum user feedback (unsupervised and semi-supervised learning algorithms).
R&D Activities: Developed a baseline method for online unsupervised training of NILM models based on Hart's algorithm. Backend system developed in python.

2013-2016 **SPLENDID: Personalised guide for eating and activity behaviour for the prevention of obesity and eating disorders**. Development of a detailed eating and activity behaviour monitoring and guidance system to prevent obesity and eating disorders.
Funding: European Commission, FP7 **Role:** Leader of work package "Information processing and inference", responsible for extracting behavioural indicators from signals and for building data-driven behavioural models.
R&D Activities: Development of a new chewing sensor using an in-ear microphone, PPG and accelerometer signals (in collaboration with CSEM S.A.). Development of signal processing and machine learning algorithms to identify chews, snacks and food structure. Development of algorithms for analysing in-meal eating behaviour using a plate scale (Mandometer). Also, development of models for detecting potentially high-risk behaviour across multiple indicators.
Website: https://splendid-program.eu/

2011-2013 **CASSANDRA: A multivariate platform for assessing the impact of strategic decisions in electrical power systems**. A consumption behaviour modelling platform for residential and small-scale commercial electricity consumers. The platform's purpose is to assess the effectiveness of feedback and pricing incentives for peak reduction in demand-response programmes.
Funding: European Commission, FP7 **Role:** Responsible for coordination of technical work and piloting activities across 9 different partners. Responsible for the development of small-scale electricity consumer models.
R&D Activities: Probabilistic electrical energy consumer models that support

simulation and response modelling in different pricing models (demand response). Experiments using data collected from two pilot deployments at a residential building in Luleå, Sweden and a mall near Milan, Italy.

2007-2010 **VITALAS: Video and image indexing and retrieval in the large scale**. An image and video retrieval engine for large multimedia archives. Includes similarity search and cross-media concept-based retrieval.
Funding: European Commission, FP6 **Role:** Research and development of the cross-media concept-based image and video retrieval system.
R&D Activities: Cross-media concept-based indexing and retrieval of images and videos. Concept detectors for 500 concepts using small training sets. Use of cross-domain classifiers to reduce need for large training set sizes. Use of clickthrough data for automatically generating training sets for image retrieval. Explore the noise levels in automatically generated training sets and how to handle this at the classifier level. The modules that were deployed were developed in C.
Website: http://vitalas.ercim.eu/

2006-2007 **ASSIST: Association studies assisted by inference and semantic technologies**. Design and development of a system for the unification of heterogeneous medical archives in the cervical cancer domain.
Funding: European Commission, FP6 **Role:** Development of the system specifications. Participation in the design of the system ontology.
R&D Activities: System design and system specifications. Development of an ontology (in OWL) for association studies in the cervical cancer domain.

Current research interests

Domain generalization of ML models: The aim is to train models that robustly identify the target classes/values under data distribution shifts or changes in the data domain (e.g., different statistics of the background in natural images, different source/device in the case of biosignals)

Applications of AI and ML in Health: Examples include (a) representation learning for processing unstructured health data (such as signals), (b) modeling of dietary and physical activity behavior from wearables and videos and (c) exploring the capabilities of combining structural causal models and machine learning for developing explainable causal disease models from multiple sources of observational data.

ML model explainability: Development of new methods to communicate and/or visualize the characteristics of so-called "black-box" ML models, to provide intuition regarding their behavior. More specifically, the focus is on models for global and regional explainability, as well as in the development of effective, explainable-by-design models.

Causal modeling in ML: In this emerging and ambitious field we wish to replace the traditional i.i.d. data assumption of statistical machine learning with more relaxed assumptions about underlying causal structures within each problem domain. This would lead to solutions on

several modern ML problems such as generalization, continual and task incremental learning, robustness to adversarial attacks, and possibly model bias and explainability.

Fairness in ML models handling multiple modalities: We try to develop methods for bias mitigation, focusing on in-processing methods to remove association bias (e.g., visual features that are spuriously correlated with the target class). Effort is made to handle protected attributes at the representation level, in order to be able to handle (a) limited or non-existent labels of the protected attribute and (b) visual/signal attributes that introduce bias but are not clearly defined.

Teaching

Harokopio University of Athens

2020-2024

- **Machine Learning and Applications** (undergraduate)
- **Artificial Intelligence** (undergraduate)
- **Health and Communication Technologies** (undergraduate and postgraduate). Module jointly taught with **Rutgers University**
- **Programming I** (undergraduate)
- **Artificial Intelligence and Applications on the Internet of Things** (postgraduate)
- **Artificial Intelligence and Deep Learning in Healthcare** (postgraduate)
- **Data Management II** (postgraduate - Applied Informatics)
- **Computational Intelligence and Cognitive Computing** (postgraduate - MPhil in Computer Science)

Previous teaching experience

I have designed and taught the following courses at the Electrical and Computer Engineering Department, Aristotle University of Thessaloniki, Greece:

2018-2019 **Internet of Things and Applications** (postgraduate, independent teaching of 40% of the course)

2018-2019 **Machine learning** (postgraduate, independent teaching of the entire course)

2017-2018 **Multimedia Systems** (undergraduate, independent teaching of the entire course)

2016-2017 **Human-Computer Interaction** (postgraduate, independent teaching of the

entire course)

2016-2017 **Multimedia Systems and Graphics** (postgraduate, independent teaching of the entire course)

2005-2009 **Algorithm design and analysis** (undergraduate, teaching assistant)

2005-2007 **Computer systems** (undergraduate, teaching assistant)

PhD students

Ordered by starting date:

- Niki Kiriakidou
- Aristotelis Ballas
- Vasileios Gkolemis
- Ioannis Sarridis

Other

- Supervised 19 undergraduate and 4 postgraduate (MSc) theses at DIT/HUA
- Co-supervised 3 PhD theses (completed) at the Aristotle University of Thessaloniki (main supervisor: Anastasios Delopoulos).
- Supervised and co-supervised several undergraduate diploma theses and postgraduate master theses at the Harokopio University of Athens and the Aristotle University of Thessaloniki.
- I have been a training instructor for machine learning at Veltio SA (http://www.veltio.com) for a year in 2017.

Academic activities

Workshops

- **ECML-PKDD 2023 workshop**: "Uncertainty meets Explainability in Machine Learning"
  - https://xai-uncertainty.github.io

Reviewer for International Journals

- IEEE Transactions on Neural Networks and Learning Systems
- IEEE Transactions on Artificial Intelligence
- IEEE Transactions on Image Processing
- IEEE Transactions on Multimedia
- IEEE Access
- IEEE Transactions on Cybernetics
- IEEE Journal of Biomedical and Health Informatics
- Nature Scientific Reports
- ACM Transactions on Multimedia
- ACM-Springer Multimedia Systems
- Artificial Intelligence
- Computer Methods and Programs in Biomedicine
- Engineering Applications of Artificial Intelligence
- Knowledge-Based Systems
- Pattern Recognition
- SpringerPlus
- Service-Oriented Computing and Applications
- International Journal of Neural Systems
- Multimedia Tools and Applications
- JMIR mHealth and uHealth
- Journal of Medical Internet Research
- MDPI Sensors
- MDPI Nutrients
- Energy Efficiency
- International Journal of Computer Systems Science and Engineering
- International Journal of Metadata, Semantics and Ontologies

Conference PC member/reviewer

- ECAI 2024
- ICMR 2023, 2024
- ECML-PKDD 2022, 2024
- ECCV 2022, 2024
- AIAI 2022, 2023, 2024
- IEEE BHI 2019, 2022
- ACM-MM/MADiMa workshop, 2022, 2023
- IEEE PICom 2019, 2021, 2022
- IEEE PAIW 2022
- IEEE SITIS 2013-2022
- IEEE ROMAN 2022
- ACM SIGIR 2010, 2012
- IEEE SMAP 2006
- ICARCV-2006

Talks / invited lectures

- "Using Real-World Data and Causal Models to Support Research on the Quality of Life of Breast Cancer Patients", Keynote Speech at the Norwegian National Network for Breast Cancer Research, 2024
- "Bias in machine learning: Detection and mitigation in health data". Full day lecture and workshop for the "Diet, physical activity and disease prevention – interventions, mHealth and eHealth" postgraduate course at Karolinska Institute, 2024
- "New methods for global interpretability of differentiable machine learning models", invited talk at the "Data science for decision support in uncertain environment" workshop, Department of Mathematics, University of Patras, 2023.
- "Uncertainty meets Explainability in Machine Learning", introductory talk at the corresponding ECML-PKDD workshop, Sep. 2023
- Invited 3-hour lecture at the "Summer: Rutgers- Health Communication & Health Inequalities Across the Health Professions in Greece & the U.S.", summer school, 2023
- "A short tutorial on Domain Generalization", invited tutorial at IEEE BigDataservice 2023 (with Aristotelis Ballas)

- "Artificial Intelligence for Healthcare and Applications in the Study of Childhood Obesity" (in Greek), Conference of Child and Adolescent Endocrinology, 2023
- "Applications of Artificial Intelligence in Endocrinology and Measurement of Dietetic Behavior" (in Greek), Annual Greek Paediatritian College Conference, 2023
- "Artificial Intelligence and Machine Learning for Objective Intake Monitoring", Invited talk at ICONSD 2022, May. 2022
- "New Methods for Objective Measurements of Eating Behavior in Free-Living Conditions", Invited talk at SSIB 2021, Jul 2021
- "Machine Learning for Objective Behavior Measurement and its Potential in Improving Health Communication", 1st Harokopio-Rutgers University joint e-Symposium, June 2021
- "Artificial Intelligence for Eating Behavior Monitoring (in Greek)", Seminar of the Informatics and Telematics postgraduate programme, Mar 2021
- "Big Data Against Childhood Obesity: Methods and Prospects for Use in Public Health (in Greek)", Invited talk at the 13th MSD conference, Sep. 2020

Evaluation Committees

2020-2024 Examiner for

- 1 Ph.D. thesis at the Department of Informatics and Telematics, Harokopio University of Athens
- 2 Ph.D. theses at the University of Newcastle, New South Wales, Australia
- 3 Ph.D. theses at the Electrical and Computer Engineering Department, Aristotle University of Thessaloniki

2022 Evaluator for two research projects funded by the European Commission

Awards

2023 Best paper award in IEEE BigDataService 2023 for [C1] (with Anastasios Iliopoulos, Ioannis Violos and Iraklis Varlamis)

2022 Best paper award in AIAI 2022 for [C2] (with Niki Kiriakidou)

2020-2022 Two consecutive teaching awards for highest-rated mandatory course from the Department of Informatics and Telematics, Harokopio University of Athens

2012 Excellence scholarship for postdoctoral research from the Aristotle University

2007 Award for academic performance by the Technical Chamber of Greece

2005-2008 Three-year scholarship by the Greek National Scholarships Foundation

1999 Scholarship for top performance (1st) in the admission exams for the Electrical and Computer Engineering Department of AUTH

Scientific Publications

The following publications have received 1090 citations as of April, 2024, according to Google Scholar.

Thesis

[T] Christos Diou. "Semantic Analysis of Multimedia Data with Machine Learning (in Greek)". Ph.D. Thesis. Electrical and Computer Engineering Department, Aristotle university of Thessaloniki, Nov. 2010.

Journals

[J1] Pietro Melzi, Ruben Tolosana, Ruben Vera-Rodriguez, Minchul Kim, Christian Rathgeb, Xiaoming Liu, et al. "FRCSyn-onGoing: Benchmarking and comprehensive evaluation of real and synthetic data to improve face recognition systems". In: *Information Fusion* 107 (2024), p. 102322. ISSN: 1566-2535.

[J2] Aristotelis Ballas and Christos Diou. "Multi-Scale and Multi-Layer Contrastive Learning for Domain Generalization". In: *IEEE Transactions on Artificial Intelligence* (2024), pp. 1–14.

[J3] Friska Dhammawati, Petter Fagerberg, Christos Diou, Ioanna Mavrouli, Evangelia Koukoula, Eirini Lekka, et al. "Ultra-Processed Food vs. Fruit and Vegetable Consumption before and during the COVID-19 Pandemic among Greek and Swedish Students". In: *Nutrients* 15.10 (2023), p. 2321.

[J4] Polychronis Charitidis, Sotirios Moschos, Archontis Pipertzis, Ioakeim James Theologou, Michael Michailidis, Stavros Doropoulos, Christos Diou, and Stavros Vologiannidis. "StreetScouting: A Deep Learning Platform for Automatic Detection and Geotagging of Urban Features from Street-Level Images". In: *Applied Sciences* 13.1 (2023), p. 266.

[J5] Adele R Tufford, Christos Diou, Desiree A Luccassen, Ioannis Ioakimidis, Grace O'Malley, Leonidas Alagialoglou, et al. "Towards Systems Models for Obesity Prevention: A Big Role for Big Data". In: *Current Developments in Nutrition* (July 2022). ISSN: 2475-2991.

[J6] Christos Diou, Konstantinos Kyritsis, Vasileios Papapanagiotou, and Ioannis Sarafis. "Intake monitoring in free-living conditions: Overview and lessons we have learned". In: *Appetite* 176 (2022), p. 106096. ISSN: 0195-6663.

[J7] Dimitris Filos, Irini Lekka, Vasileios Kilintzis, Leandros Stefanopoulos, Youla Karavidopoulou, Christos Maramis, et al. "Exploring Associations Between Children's Obesogenic Behaviors and the Local Environment Using Big Data: Development and Evaluation of the Obesity Prevention Dashboard". In: *JMIR Mhealth Uhealth* 9.7 (July 2021), e26290. ISSN: 2291-5222.

[J8] Ioanna-M. Chatzigeorgiou, Christos Diou, Kyriakos C. Chatzidimitriou, and Georgios T. Andreou. "Demand Response Alert Service Based on Appliance Modeling". In: *Energies* 14.10 (2021). ISSN: 1996-1073.

[J9] Petter Fagerberg, Evangelia Charmandari, Christos Diou, Rachel Heimeier, Youla Karavidopoulou, Penio Kassari, et al. "Fast Eating Is Associated with Increased BMI among High-School Students". In: *Nutrients* 13.3 (2021). ISSN: 2072-6643.

[J10] Billy Langlet, Christos Maramis, Christos Diou, Nikolaos Maglaveras, Petter Fagerberg, Rachel Heimeier, et al. "Formative Evaluation of a Smartphone App for Monitoring Daily Meal Distribution and Food Selection in Adolescents: Acceptability and Usability Study". In: *JMIR Mhealth Uhealth* 8.7 (July 2020), e14778. ISSN: 2291-5222.

[J11] Athanasia Tragomalou, George Moschonis, Yannis Manios, Penio Kassari, Ioannis Ioakimidis, Christos Diou, et al. "Novel e-Health Applications for the Management of Cardiometabolic Risk Factors in Children and Adolescents in Greece". In: *Nutrients* 12.5 (2020), p. 1380.

[J12] Konstantinos Kyritsis, Christos Diou, and Anastasios Delopoulos. "A Data Driven End-to-end Approach for In-the-wild Monitoring of Eating Behavior Using Smartwatches". In: *IEEE Journal of Biomedical and Health Informatics* (2020).

[J13] Billy Langlet, Petter Fagerberg, Anastasios Delopoulos, Vasileios Papapanagiotou, Christos Diou, Christos Maramis, et al. "Predicting real-life eating behaviours using single school lunches in adolescents". In: *Nutrients* 11.3 (2019), p. 672.

[J14] Konstantinos Kyritsis, Christos Diou, and Anastasios Delopoulos. "Modeling Wrist Micromovements to Measure In-Meal Eating Behavior from Inertial Sensor Data". In: *IEEE Journal of Biomedical and Health Informatics* (2019).

[J15] Christos Diou, Pantelis Lelekas, and Anastasios Delopoulos. "Image-Based Surrogates of Socio-Economic Status in Urban Neighborhoods Using Deep Multiple Instance Learning". In: *Journal of Imaging* 4.11 (2018), p. 125.

[J16] Janet van den Boer, Annemiek van der Lee, Lingchuan Zhou, Vasileios Papapanagiotou, Christos Diou, Anastasios Delopoulos, and Monica Mars. "The SPLENDID Eating Detection Sensor: Development and Feasibility Study". In: *JMIR mHealth and uHealth* 6.9 (2018).

[J17] Georgios Mamalakis, Christos Diou, Andreas Symeonidis, and Leonidas Georgiadis. "Of daemons and men: Reducing false positive rate in Intrusion Detection Systems with fileesystem footprint analysis". In: *Neural Computing and Applications* (2018).

[J18] Mayram Esfandiari, Vasileios Papapanagiotou, Christos Diou, Modjtaba Zandian, Jenny Nolstam, Per Södersten, and Cecilia Bergh. "Control of Eating Behavior Using a Novel Feedback System". In: *J. Vis. Exp.* e57432.135 (2018).

[J19] Vasileios Papapanagiotou, Christos Diou, Ioannis Ioakimidis, Per Sodersten, and Anastasios Delopoulos. "Automatic analysis of food intake and meal microstructure based on continuous weight measurements". In: *IEEE Journal of Biomedical and Health Informatics* (2018). ISSN: 2168-2194.

[J20] Vasileios Papapanagiotou, Christos Diou, Lingchuan Zhou, Janet van den Boer, Monica Mars, and Anastasios Delopoulos. "A Novel Chewing Detection System Based on PPG, Audio, and Accelerometry". In: *IEEE Journal of Biomedical and Health Informatics* 21.3 (2017), pp. 607–618. ISSN: 2168-2194.

[J21] Billy Langlet, Anna Anvret, Christos Maramis, Ioannis Moulos, Vasileios Papapanagiotou, Christos Diou, et al. "Objective measures of eating behaviour in a Swedish high school". In: *Behaviour & Information Technology* 36.10 (2017), pp. 1005–1013.

[J22] Ioannis Sarafis, Christos Diou, and Anastasios Delopoulos. "Online training of concept detectors for image retrieval using streaming clickthrough data". In: *Engineering Applications of Artificial Intelligence (EAAI)* 51 (2016), pp. 150–162.

[J23] Antonios Chrysopoulos, Christos Diou, Andreas L Symeonidis, and Pericles A Mitkas. "Response modeling of small-scale energy consumers for effective demand response applications". In: *Electric Power Systems Research* 132 (2016), pp. 78–93.

[J24] Vasileios Papapanagiotou, Christos Diou, and Anastasios Delopoulos. "Improving Concept-Based Image Retrieval with Training Weights Computed from Tags". In: *ACM Transactions on Multimedia Computing, Communications, and Applications (TOMM)* 12.2 (2015), p. 32.

[J25] Ioannis Sarafis, Christos Diou, and Anastasios Delopoulos. "Building effective SVM concept detectors from clickthrough data for large-scale image retrieval". In: *International Journal of Multimedia Information Retrieval* 4.2 (2015), pp. 129–142.

[J26] Georgios Mamalakis, Christos Diou, Andreas L. Symeonidis, and Leonidas Georgiadis. "Of daemons and men: A file system approach towards intrusion detection". In: *Applied Soft Computing* 25.0 (2014), pp. 1–14.

[J27] Antonios Chrysopoulos, Christos Diou, Andreas L. Symeonidis, and Pericles A. Mitkas. "Bottom-up modeling of small-scale energy consumers for effective Demand Response Applications". In: *EAAI '14* 35 (2014), pp. 299–315.

[J28] Christos Maramis, Manolis Falelakis, Irini Lekka, Christos Diou, Pericles A. Mitkas, and Anastasios Delopoulos. "Applying semantic technologies in cervical cancer research". In: *Data Knowl. Eng.* 86 (2013), pp. 160–178.

[J29] Theodora Tsikrika, Christos Diou, Arjen P. de Vries, and Anastasios Delopoulos. "Reliability and effectiveness of clickthrough data for automatic image annotation". In: *Multimedia Tools and Applications* 55.1 (2011), pp. 27–52.

[J30] Christos Diou, George Stephanopoulos, Panagiotis Panagiotopoulos, Christos Papachristou, Nikos Dimitriou, and Anastasios Delopoulos. "Large-Scale Concept Detection in Multimedia Data Using Small Training Sets and Cross-Domain Concept Fusion". In: *IEEE Transactions on Circuits and Systems for Video Technology* 20.12 (2010), pp. 1808–1821.

[J31] Manolis Falelakis, Christos Diou, and Anastasios Delopoulos. "Complexity control in semantic identification". In: *International Journal of Intelligent Systems Technologies and Applications* 1.3/4 (2006), pp. 247–262.

[J32] Manolis Falelakis, Christos Diou, and Anastasios Delopoulos. "Semantic Identification: Balancing between Complexity and Validity". In: *EURASIP Journal on Advances in Signal Processing* 2006 (2006).

Book chapters

[B1] Christos Diou, Nikolaos Batalas, and Anastasios Delopoulos. "Indexing and Browsing of Color Images: Design Considerations". In: *Advances in Semantic Media Adaptation and Personalization*. Vol. 93. Springer, 2008, pp. 329–346.

Conference proceedings

[C1] Anastasios Iliopoulos, John Violos, Christos Diou, and Iraklis Varlamis. "Detection of Anomalies in Multivariate Time Series Using Ensemble Techniques". In: *2023 IEEE Ninth International Conference on Big Data Computing Service and Applications (BigDataService)*. IEEE. 2023.

[C2] Niki Kiriakidou and Christos Diou. "An Improved Neural Network Model for Treatment Effect Estimation (best paper award)". In: *Artificial Intelligence Applications and Innovations*. Ed. by Ilias Maglogiannis, Lazaros Iliadis, John Macintyre, and Paulo Cortez. Cham: Springer International Publishing, 2022, pp. 147–158. ISBN: 978-3-031-08337-2.

[C3] Pietro Melzi, Ruben Tolosana, Ruben Vera-Rodriguez, Minchul Kim, Christian Rathgeb, Xiaoming Liu, et al. "FRCSyn Challenge at WACV 2024: Face Recognition Challenge in the Era of Synthetic Data". In: *Proceedings of the IEEE/CVF Winter Conference on Applications of Computer Vision*. 2024, pp. 892–901.

[C4] George Kazazis, Christos Chronis, Christos Diou, and Iraklis Varlamis. "Development and evaluation of Reinforcement Learning models for the FOSSBot Open-Source educational robot". In: *Proceedings of the 27th Pan-Hellenic Conference on Progress in Computing and Informatics*. New York, NY, USA: Association for Computing Machinery, 2024, pp. 26–35.

[C5] Antonios Makris, Evangelos Psomakelis, Ioannis Korontanis, Theodoros Theodoropoulos, Antonis Protopsaltis, Maria Pateraki, et al. "Streamlining XR Application Deployment with a Localized Docker Registry at the Edge". In: *Service-Oriented and Cloud Computing*. Ed. by George A. Papadopoulos, Florian Rademacher, and Jacopo Soldani. Cham: Springer Nature Switzerland, 2023, pp. 188–202. ISBN: 978-3-031-46235-1.

[C6] Vasilis Gkolemis, Theodore Dalamagas, Eirini Ntoutsi, and Christos Diou. "RHALE: Robust and Heterogeneity-Aware Accumulated Local Effects". In: *European Conference on Artificial Intelligence (ECAI 2023)*. IOS Press, 2023, pp. 859–866.

[C7] Manolis Maragkoudakis, Iraklis Varlamis, Symeon Papadopoulos, and Christos Diou. "Sampling strategies for mitigating bias in face synthesis methods". In: *ECML-PKDD 2023 Workshop on Bias and Fairness in AI (BIAS 2023)*. 2023 (to appear).

[C8] Ioannis Sarridis, Christos Koutlis, Symeon Papadopoulos, and Christos Diou. "Towards Fair Face Verification: An In-depth Analysis of Demographic Biases". In: *ECML-PKDD 2023 Workshop on Bias and Fairness in AI (BIAS 2023)*. 2023 (to appear).

[C9] Vasilis Gkolemis, Anargiros Tzerefos, Theodore Dalamagas, Eirini Ntoutsi, and Christos Diou. "Regionally Additive Models: Explainable-by-design models minimizing feature interactions". In: *ECML-PKDD 2023 Workshop "Uncertainty meets Explainability in Machine Learning"*. 2023 (to appear).

[C10] Aristotelis Ballas and Christos Diou. "CNN Feature Map Augmentation for Single-Source Domain Generalization". In: *2023 IEEE Ninth International Conference on Big Data Computing Service and Applications (BigDataService)*. 2023, pp. 127–131.

[C11] Aristotelis Ballas and Christos Diou. "CNNs with Multi-Level Attention for Domain Generalization". In: *Proceedings of the 2023 ACM International Conference on Multimedia Retrieval*. 2023, pp. 592–596.

[C12] Charis Davalas, Dimitrios Michail, Christos Diou, Iraklis Varlamis, and Konstantinos Tserpes. "A Cloud-based Continual Learning System for Road Sign Classification in Autonomous Driving". In: *Proceedings of the 1st International Workshop on Computational Intelligence for Process Mining (CI4PM) and the 1st International Workshop on Pervasive Artificial Intelligence (PAI), co-located with the IEEE World Congress on Computational Intelligence (WCCI)*. 2023.

[C13] Vasilis Gkolemis, Theodore Dalamagas, and Christos Diou. "DALE: Differential Accumulated Local Effects for efficient and accurate global explanations". In: *14th Asian Conference on Machine Learning (ACML 2022)*. Hyderabad, India, 2022.

[C14] Aristotelis Ballas, Vasileios Papapanagiotou, Anastasios Delopoulos, and Christos Diou. "Listen to your heart: A self-supervised approach for detecting murmur in heart-beat sounds for the Physionet 2022 challenge". In: *Computing in Cardiology*. Tampere, Finland, 2022.

[C15] Aristotelis Ballas and Christos Diou. "Multi-layer Representation Learning for Robust OOD Image Classification". In: *12th Hellenic Conference on Artificial Intelligence*. Corfu, Greece, 2022.

[C16] Niki Kiriakidou and Christos Diou. "An evaluation framework for comparing causal inference models". In: *12th Hellenic Conference on Artificial Intelligence*. Corfu, Greece, 2022.

[C17] Aristotelis Ballas and Christos Diou. "A Domain Generalization Approach for Out-Of-Distribution 12-lead ECG Classification with Convolutional Neural Networks". In: *2022 IEEE Eight International Conference on Big Data Computing Service and Applications (BigDataService)*. 2022.

[C18] Charalampos Davalas, Dimitrios Michail, Christos Diou, Iraklis Varlamis, and Konstantinos Tserpes. "Computationally Efficient Rehearsal for Online Continual Learning". In: *Image Analysis and Processing – ICIAP 2022*. Ed. by Stan Sclaroff, Cosimo Distante, Marco Leo, Giovanni M. Farinella, and Federico Tombari. Cham: Springer International Publishing, 2022, pp. 39–49. ISBN: 978-3-031-06433-3.

[C19] Vasileios Papapanagiotou, Christos Diou, Janet van den Boer, Monica Mars, and Anastasios Delopoulos. "Recognition of Food-Texture Attributes Using an In-Ear Microphone". In: *Pattern Recognition. ICPR International Workshops and Challenges*. Ed. by Alberto Del Bimbo, Rita Cucchiara, Stan Sclaroff, Giovanni Maria Farinella, Tao Mei, Marco Bertini, Hugo Jair Escalante, and Roberto Vezzani. Cham: Springer International Publishing, 2021, pp. 558–570. ISBN: 978-3-030-68821-9.

[C20] Vasileios Papapanagiotou, Christos Diou, and Anastasios Delopoulos. "Self-Supervised Feature Learning of 1D Convolutional Neural Networks with Contrastive Loss for Eating Detection Using an In-Ear Microphone". In: *2021 43rd Annual International Conference of the IEEE Engineering in Medicine & Biology Society (EMBC)*. 2021, pp. 7186–7189.

[C21] Christos Diou and Georgios Andreou. "eeRIS-NILM: An Open Source, Unsupervised Baseline for Real-Time Feedback Through NILM". In: *2020 55th International Universities Power Engineering Conference (UPEC)*. 2020, pp. 1–6.

[C22] Ioanna-M. Chatzigeorgiou, Christos Diou, and Georgios T. Andreou. "Targeted Messaging for Appliance-based Demand Response". In: *2020 55th International Universities Power Engineering Conference (UPEC)*. 2020.

[C23] Ioanna-Mirto Chatzigeorgiou, Christos Diou, Anastasia Stefanidi, and Georgios T. Andreou. "Achieving engagement of residential electrical energy consumers through real-time feedback: The eeRIS vision". In: *2020 IEEE International Conference on Environment and Electrical Engineering and 2020 IEEE Industrial and Commercial Power Systems Europe (EEEIC / ICPS Europe)*. 2020.

[C24] Christos Diou, Ioannis Sarafis, Vasileios Papapanagiotou, Leonidas Alagialoglou, Irini Lekka, Dimitrios Filos, et al. "BigO: A public health decision support system for measuring obesogenic behaviors of children in relation to their local environment". In: *2020 42nd Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)*. 2020.

[C25] Ioannis Sarafis, Christos Diou, Vasileios Papapanagiotou, Leonidas Alagialoglou, and Anastasios Delopoulos. "Inferring the Spatial Distribution of Physical Activity in Children Population from Characteristics of the Environment". In: *2020 42nd Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)*. 2020.

[C26] Vasileios Papapanagiotou, Ioannis Sarafis, Christos Diou, Ioannis Ioakimidis, Evangelia Charmandari, and Anastasios Delopoulos. "Collecting big behavioral data for measuring behavior against obesity". In: *2020 42nd Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)*. 2020.

[C27] Christos Maramis, Ioannis Ioakimidis, Vassilis Kilintzis, Leandros Stefanopoulos, Eirini Lekka, Vasileios Papapanagiotou, et al. "Developing a Novel Citizen-Scientist Smartphone App for Collecting Behavioral and Affective Data from Children Populations". In: *Wireless Mobile Communication and Healthcare*. Springer International Publishing, 2020.

[C28] Ioannis Sarafis, Christos Diou, and Anastasios Delopoulos. "Behaviour Profiles for Evidence-based Policies Against Obesity". In: *2019 41st Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)*. 2019.

[C29] Ioannis Sarafis, Christos Diou, Ioannis Ioakimidis, and Anastasios Delopoulos. "Assessment of In-Meal Eating Behaviour Using Fuzzy SVM". In: *2019 41st Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)*. 2019.

[C30] Konstantions Kyritsis, Christos Diou, and Anastasios Delopoulos. "Detecting Meals in the Wild Using the Inertial Data of a Typical Smartwatch". In: *2019 41st Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)*. 2019.

[C31] Konstantinos Kyritsis, Christos Diou, and Anastasios Delopoulos. "End-to-end Learning for Measuring in-meal Eating Behavior from a Smartwatch". In: *2018 40th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)*. 2018.

[C32] Konstantinos Kyritsis, Christos Diou, and Anastasios Delopoulos. "Food Intake Detection from Inertial Sensors Using LSTM Networks". In: *New Trends in Image Analysis and Processing–ICIAP 2017 Workshops*. Springer International Publishing. 2017, pp. 411–418.

[C33] Angelos Katharopoulos, Despoina Paschalidou, Christos Diou, and Anastasios Delopoulos. "Learning local feature aggregation functions with backpropagation". In: *2017 25th European Signal Processing Conference (EUSIPCO)*. 2017, pp. 748–752.

[C34] Vasileios Papapanagiotou, Christos Diou, Lingchuan Zhou, Janet van den Boer, Monica Mars, and Anastasios Delopoulos. "The SPLENDID chewing detection challenge". In: *2017 39th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)*. 2017, pp. 817–820.

[C35] Konstantinos Kyritsis, Christina-Lefkothea Tatli, Christos Diou, and Anastasios Delopoulos. "Automated analysis of in meal eating behavior using a commercial wristband IMU sensor". In: *2017 39th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)*. 2017, pp. 2843–2846.

[C36] Vasileios Papapanagiotou, Christos Diou, and Anastasios Delopoulos. "Chewing detection from an in-ear microphone using convolutional neural networks". In: *2017 39th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)*. 2017, pp. 1258–1261.

[C37] Christos Diou, Ioannis Sarafis, Ioannis Ioakimidis, and Anastasios Delopoulos. "Data-driven assessments for sensor measurements of eating behavior". In: *Proceedings of the 2017 International Conference on Biomedical and Health Informatics, (BHI2017)*. Orlando, Florida, USA, 2017.

[C38] Angelos Katharopoulos, Despoina Paschalidou, Christos Diou, and Anastasios Delopoulos. "Fast Supervised LDA for discovering micro-events in large-scale video datasets". In: *In proceedings of the 24th ACM international conference on multimedia (ACM-MM 2016)*. Amsterdam, The Netherlands, 15-19 October 2016, 2016.

[C39] Vasileios Papapanagiotou, Christos Diou, and Anastasios Delopoulos. "A novel approach for chewing detection based on a wearable PPG sensor". In: *In Proceedings of the 38th annual international conference of the IEEE Engineering in Medicine and Biology Society*. Orlando, FL, 16-20 August, 2016, 2016.

[C40] Vasileios Papapanagiotou, Christos Diou, Zhou Lingchuan, Janet van den Boer, Monica Mars, and Anastasios Delopoulos. "Fractal Nature of Chewing Sounds". In: *New Trends in Image Analysis and Processing–ICIAP 2015 Workshops*. Springer International Publishing, 2015, pp. 401–408.

[C41] Vasileios Papapanagiotou, Christos Diou, Billy Langlet, Ioannis Ioakimidis, and Anastasios Delopoulos. "A parametric Probabilistic Context-Free Grammar for food intake analysis based on continuous meal weight measurements". In: *Engineering in Medicine and Biology Society (EMBC), 2015 37th Annual International Conference of the IEEE*. IEEE. 2015, pp. 7853–7856.

[C42] George Mamalakis, Christos Diou, and Andreas L Symeonidis. "Analysing Behaviours for Intrusion Detection". In: *Communication Workshop (ICCW), 2015 IEEE International Conference on*. IEEE. 2015, pp. 2645–2651.

[C43] Vasileios Papapanagiotou, Christos Diou, Billy Langlet, Ioannis Ioakimidis, and Anastasios Delopoulos. "Automated Extraction of Food Intake Indicators from Continuous Meal Weight Measurements". In: *Bioinformatics and Biomedical Engineering*. Springer International Publishing, 2015, pp. 35–46.

[C44] Christos Maramis, Christos Diou, Ioannis Ioakeimidis, Irini Lekka, Gabriela Dudnik, Monica Mars, et al. "SPLENDID: Preventing Obesity and Eating Disorders through Long-term Behavioural Modifications". In: *MOBIHEALTH 2014*. ATHENES, Greece, 2014.

[C45] Ioannis Sarafis, Christos Diou, and Anastasios Delopoulos. "Building robust concept detectors from clickthrough data: A study in the MSR-Bing dataset". In: *9th International Conference on Semantic Media Adaptation and Personalisation (SMAP2014)*. Corfu, Greece, Nov. 2014.

[C46] Ioannis Sarafis, Christos Diou, Theodora Tsikrika, and Anastasios Delopoulos. "Weighted SVM from Clickthrough Data for Image Retrieval". In: *IEEE International Conference on Image Processing (ICIP 2014)*. Paris, France, Oct. 2014.

[C47] Theodora Tsikrika and Christos Diou. "Multi-evidence User Group Discovery in Professional Image Search". In: *36th European Conference on Information Retrieval (ECIR 2014)*. Amsterdam, The Netherlands, Apr. 2014.

[C48] Antonios Chrysopoulos, Christos Diou, Andreas Symeonidis, and Pericles Mitkas. "Agent-based small-scale energy consumer models for energy portfolio management (best student paper award)". In: *Proceedings of the 2013 IEEE/WIC/ACM International Conference on Intelligent Agent Technology (IAT 2013)*. Atlanta, GA, USA, 2013.

[C49] Georgios T. Andreou, Andreas L. Symeonidis, Christos Diou, Pericles A. Mitkas, and Dimitrios P. Labridis. "A framework for the implementation of large scale Demand Response". In: *Smart Grid Technology, Economics and Policies (SG-TEP), 2012 International Conference on*. Nuremberg, Germany, 2012.

[C50] Christos Diou, George Stephanopoulos, and Anastasios Delopoulos. "The Multimedia Understanding Group at TRECVID-2010". In: *Proceedings of the TRECVID 2010 Workshop*. 2010.

[C51] Christos Diou, George Stephanopoulos, Nikos Dimitriou, Panos Panagiotopoulos, Christos Papachristou, Anastasios Delopoulos, et al. "VITALAS at TRECVID-2009". In: *Proceedings of the TRECVID 2009 Workshop*. 2009.

[C52] Theodora Tsikrika, Christos Diou, Arjen P. de Vries, and Anastasios Delopoulos. "Are click-through data reliable as image annotations?" In: *In Proceedings of the Theseus/ImageCLEF workshop on visual information retrieval evaluation*. Corfu, Greece, 2009.

[C53] Theodora Tsikrika, Christos Diou, Arjen P. de Vries, and Anastasios Delopoulos. "Image annotation using clickthrough data". In: *8th ACM International Conference on Image and Video Retrieval, CIVR*. 2009.

[C54] Christos Diou, Christos Papachristou, Panagiotis Panagiotopoulos, Gegorgios Stephanopoulos, Nikolaos Dimitriou, Anastasios Delopoulos, et al. "VITALAS at TRECVID-2008". In: *Proceedings of the TRECVID 2008 Workshop*. 2008.

[C55] P. Mitkas, V. Koutkias, A. Symeonidis, M. Falelakis, C. Diou, I. Lekka, et al. "Association studies on cervical cancer facilitated by inference and semantic technologies: The ASSIST approach". In: *Proceedings of the International Congress of the European Federation for Medical Informatics (MIE08), Göteborg, Sweden*. Göteborg, Sweden, 2008.

[C56] Nikos Batalas, Christos Diou, and Anastasios Delopoulos. "Efficient indexing, color descriptors and browsing in image databases". In: *Proceedings of the 1st International Workshop on Semantic Media Adaptation and Personalization (SMAP06)*. Athens, Greece, 2006.

[C57] Christos Diou, Giorgos Katsikatsos, and Anastasios Delopoulos. "Constructing fuzzy relations from WordNet for word sense disambiguation". In: *Proceedings of the 1st International Workshop on Semantic Media Adaptation and Personalization (SMAP06)*. Athens, Greece, 2006.

[C58] Christos Diou, Anastasia Manta, and Anastasios Delopoulos. "Space-time tubes and motion representation". In: *Proceedings of the 3rd IFIP Conference on Artificial Intelligence Applications and Innovations (AIAI)*. Athens, Greece, 2006.

[C59] Manolis Falelakis, Christos Diou, Manolis Wallace, and Anastasios Delopoulos. "Minimizing uncertainty in semantic identification when computing resources are limited". In: *Proceedings of the 2005 International Conference on Artificial Neural Networks (ICANN05)*. Warsaw, Poland, 2005.

[C60] Christos Diou, Manolis Falelakis, and Anastasios Delopoulos. "Knowledge based unification of medical archives". In: *Proceedings of the 2005 International Networking Conference (INC2005)*. Samos, Greece, 2005.

[C61] Manolis Falelakis, Christos Diou, Anastasios Valsamidis, and Anastasios Delopoulos. "Complexity Control in Semantic Identification". In: *IEEE International Conference on Fuzzy Systems, Reno, Nevada, USA*. 2005.

[C62] Manolis Falelakis, Christos Diou, Anastasios Valsamidis, and Anastasios Delopoulos. "Dynamic Semantic Identification with Complexity Constraints as a Knapsack Problem". In: *IEEE International Conference on Fuzzy Systems, Reno, Nevada, USA*. 2005.

[C63] Manolis Falelakis, Christos Diou, and Anastasios Delopoulos. "Identification Of Semantics: Balancing between Complexity and Validity". In: *IEEE workshop in Multimedia Signal Processing (MMSP), Siena, Italy*. 2004.

Other

[O1] Christos Diou, Konstantinos Kyritsis, Vasileios Papapanagiotou, Ioannis Sarafis, and Anastasios Delopoulos. "Artificial intelligence and machine learning for objective intake monitoring". In: *Public Health and Toxicology* 2.Supplement 1 (2022). ISSN: 2732-8929.

[O2] Penio Kassari, Athanasia Tragomalou, Aikaterini Vourdoumpa, Diamanto Koutaki, Marina Papadopoulou, Maria Manou, et al. "Evaluation of the BigO behavioral indicators in overweight and obese children and adolescents". In: *Hormone Research in Paediatrics (ESPE Abstracts)* 82 (Supp 1) (2021).

[O3] Penio Kassari, Athanasia Tragomalou, Aikaterini Vourdoumpa, Diamanto Koutaki, Marina Papadopoulou, Maria Manou, et al. "Evaluation of the BigO system during the COVID-19 outbreak in Greece". In: *Hormone Research in Paediatrics (ESPE Abstracts)* 82 (Supp 1) (2021).

[O4] Penio Kassari, Athanasia Tragomalou, Aikaterini Vourdoumpa, Diamanto Koutaki, Marina Papadopoulou, Maria Manou, et al. "Evaluation of the BigO system in a clinical setting in Greece". In: *Hormone Research in Paediatrics (ESPE Abstracts)* 82 (Supp 1) (2021).

[O5] Athanasia Tragomalou, Penio Kassari, Ioannis Ioakeimidis, Konstantinos Filis, Eleni Theodoropoulou, Giorgos Lymperopoulos, et al. "BigO: The use of New Technologies for the Management of Childhood Obesity – A Clinical Pilot Study". In: *58th Annual ESPE*. Vol. 92. European Society for Paediatric Endocrinology. 2019.

[O6] Christos Diou, Ioannis Ioakeimidis, Evangelia Charmandari, Penio Kassari, Irini Lekka, Monica Mars, et al. "BigO: Big Data Against Childhood Obesity". In: *57th Annual ESPE*. Vol. 89. European Society for Paediatric Endocrinology. 2018.

[O7] Janet van den Boer, Annemiek van der Lee, Christos Maramis, Christos Diou, Ioannis Ioakeimidis, Irini Lekka, et al. "SPLENDID: A new mobile tool for weight management". In: *Appetite* 107 (2016), p. 678.

[O8] I Lekka, C Maramis, C Diou, I Ioakeimidis, Z Lingchuan, M Mars, et al. “SPLENDID: PREVENTING OBESITY AND EATING DISORDERS THROUGH BEHAVIOURAL MONITORING AND NORMALIZATION”. In: *ACTA PAEDIATRICA*. Vol. 106. WILEY-BLACKWELL 111 RIVER ST, HOBOKEN 07030-5774, NJ USA. Academic Press, 2016, p. 678.

[O9] Christos Diou and Jacek Karwatka. “Some methods of identification high clutter regions in radar tracking system”. In: *Postepy Radiotechniki* 48.147 (2003), pp. 3–15.

Patent

[P1] Cecilia Bergh, Per Södersten, Ioannis Ioakeimidis, Vasileios Papapanagiotou, Christos Diou, and Anastasios Delopoulos. *A PROBABILISTIC CONTEXT FREE GRAMMAR FOR FOOD INTAKE*. Patent No: WO/2016/167701. WIPO URL: https://patentscope.wipo.int/search/en/detail.jsf?docId=WO2016167701. 2016.