

Dr. MICHAEL PANAGOPOULOS (Curriculum Vitae)

PERSONAL INFORMATION

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Date of Birth: 15 August 1977

Nationality: Hellenic

EDUCATION

NATIONAL TECHNICAL UNIVERSITY OF ATHENS

Athens, Greece

PhD Thesis, School of Electrical and Computing Engineering

February 2004 – July 2008

- «Identification of the writer of ancient Greek inscriptions and study of the style that archaeological finds were made of, using novel algorithms of pattern recognition and image processing»

NATIONAL TECHNICAL UNIVERSITY OF ATHENS

Athens, Greece

Diploma of Electrical and Computing Engineering

September 1997 - October 2002

- *Flow Computer Systems.*
Degree: *Very Good*
- Member of the university water polo club (distinction at the National University Championships)

LYCEE LEONIN N. SMYRNI

Athens, Greece

Apolytirion

June 1995

TEACHING EXPERIENCE

IONIAN UNIVERSITY

Corfu, Greece

Associate Professor, Department of Audio-Visual Arts

December 2022 – Today

IONIAN UNIVERSITY

Corfu, Greece

Assistant Professor, Department of Audio-Visual Arts

August 2016 – December 2022

- Discipline: Pattern Recognition on Cultural Visual and Artistic Applications
- Teaching Courses:
Introduction to Computer Science I (1st Semester),
Introduction to Computer Science II (2nd Semester)
Introduction to Programming I (3rd Semester),
Mathematics and Art (1st Semester),
Digital Synthesis of Virtual Environments (9th Semester),
Mathematics for Audiovisual Arts (4th Semester),
Artificial Intelligence (10th Semester)
Artificial Intelligence in Practice (Postgraduate Program)
Audiovisual Systems for Alternative Reality (Postgraduate Program)

IONIAN UNIVERSITY

Corfu, Greece

Lecturer, Department of Audio-Visual Arts

January 2014 – August 2016

- Discipline: Pattern Recognition on Cultural Visual and Artistic Applications
- Teaching Courses:
Introduction to Computer Science I (1st Semester),

Introduction to Computer Science II (2st Semester)
Introduction to Programming I (3rd Semester),
Mathematics and Art (1nd Semester),
Digital Synthesis of Virtual Environments (9th Semester),
Mathematics for Audiovisual Arts (4th Semester),
Artificial Intelligence (10th Semester)

IONIAN UNIVERSITY

Adjunct Lecturer, Department of Audio-Visual Arts

Corfu, Greece
October 2008 – December 2012

- Taught Courses:
Introduction to Computer Science I (1st Semester),
Introduction to Programming II (3rd Semester),
Website Development (3rd Semester),
Introduction to Computer Science II (2nd Semester),
Introduction to Computer Science II (Lab) (2nd Semester),
3D Graphics (6th Semester),
Introduction to Programming I (Lab) (2nd Semester),
Mathematics and Art (2nd Semester)
Mathematics for Audiovisual Arts (4th Semester).

NATIONAL TECHNICAL UNIVERSITY

Subsidiary Teaching, School of Electrical and Computing Engineering

Athens, Greece
February 2004 – June 2008

- Teaching Lessons:
Logic Design of Digital Systems (2nd Semester),
Digital Systems Lab (4th Semester),
Digital Signal Processing Algorithms (Graduate),
Computer Application Development (2nd Semester - School of Naval Architecture and Marine Engineering)

CRAM SCHOOL «REMPAMPI»

Athens, Greece
October 2007 - June 2008

- Teaching lesson: Application Development in Programming Environment

CRAM SCHOOL «QUANTUM»

Athens, Greece
October 2007 - June 2008

- Teaching lesson: Application Development in Programming Environment

INSTITUTE OF PROFESSIONAL TRAINING (I.E.K.) KALAMAKIOY

Athens, Greece
October 2004 - June 2006
October 2012 – June 2013

- Teaching Lessons:
UNIX (3rd Semester specialty «Multimedia Computer Applications Technician»),
2D and 3D Animation – 3D MAX (3rd Semester specialty «Multimedia Computer Applications Technician»),
Data Structures (1st Semester specialty “Multimedia Computer Applications Technician”)
Data Bases (1st Semester specialty “Multimedia Computer Applications Technician”)
Operating Systems (3rd Semester specialties «PC & Office electronic Devices Technician», «Telecommunication & Data Transmission Systems Technician»),
Installations Automatics (3rd Semester, specialties «Air-conditioning installation Technician», «Gas Fuel Technician»),
Microprocessors (Lab and Theory) (2nd Semester, specialties «PC & Office electronic Devices Technician», «Telecommunication & Data Transmission Systems Technician»)
Computer Use (1st Semester & 2nd Semester, specialties «PC & Office electronic Devices Technician», «Telecommunication & Data Transmission Systems Technician»),

RESEARCH WORK

Fields of Interest

Application of Digital Signal Processing and Pattern Recognition in Archaeology-Heritage, Arts and Cultural Heritage,
Digital Image and Audio Processing,
Pattern Recognition,
Computer Vision,
Artificial Intelligence,
Machine Learning.

RESEARCH PROGRAMMS

IONIAN UNIVERSITY Corfu, Greece
Scientific Director, Department of Audio & Visual Arts April 2021 – Today

Hub of Arts Laboratory (HAL) , EPAnEK

IONIAN UNIVERSITY Corfu, Greece
Department of Audio & Visual Arts November 2020 – January 2021

BRENDA-Digital Gastronomy Routes, EPAnEK

IONIAN UNIVERSITY Corfu, Greece
Scientific Director, Department of Audio & Visual Arts September 2018 – December 2020

Common Initiatives to Acknowledge and valorize ^[1]_[SEP] tourism potential of the programme area through cinema
CIAK, INTERREG Greece – Italy,

IONIAN UNIVERSITY Corfu, Greece
Department of Audio & Visual Arts May 2020 – December 2020

Corfu Cultural Adventure Game, C.CAGE, ΕΣΠΑ, Περιφέρεια Ιονίων Νήσων

IONIAN UNIVERSITY Corfu, Greece
Department of Informatics

Τεχνολογία για την Ενεργοποίηση Ανοιχτής Πόλης OCTANE, INTERREG Greece – Italy,

ARISTOTLE UNIVERSITY OF THESSALONIKI Thessaloniki, Greece
April 2013 – December 2013

Advanced Tourism Planning System (ATLAS), Artificial Intelligence & Information Analysis Laboratory,
Department of Informatics

Publications in Peer Reviewed Journals

[J1]. Vlachou, S.; Panagopoulos, M. “An Examination of Classical Art Impact and Popularity through Social Media Emotion Analysis of Art Memes and Museum Posts.” *Information* 2022, 13, 468.
<https://doi.org/10.3390/info13100468> [Impact Score: 4.2 (Clarivate Analytics), Q2]

- [J2]. Vlachou, Sofia, and Michail Panagopoulos. "The Arc de Triomphe, Wrapped: Measuring Public Installation Art Engagement and Popularity through Social Media Data Analysis." *Informatics* 9, no. 2 (June 2022): 41. <https://doi.org/10.3390/informatics9020041>. [Impact Score: 4.88 (Clarivate Analytics), Q1]
- [J3]. Lamprogeorgos, Aristeidis, Minas Pergantis, Michail Panagopoulos, and Andreas Giannakouloupoulos. "Aesthetic Trends and Semantic Web Adoption of Media Outlets Identified through Automated Archival Data Extraction." *Future Internet* 14, no. 7 (July 2022): 204. <https://doi.org/10.3390/fi14070204>. [Impact Score: 5.4 (Clarivate Analytics), Q2]
- [J4]. Dimitrios Arabadjis, Fotios Giannopoulos, Michail Panagopoulos, Michail Exarchos, Christopher Blackwell, Constantin Papaodysseus, "A general methodology for identifying the writer of codices. Application to the celebrated "twins", *Journal of Cultural Heritage, Volume 39, Pages 186-201, September - October 2019* <https://www.sciencedirect.com/science/article/abs/pii/S1296207418305119>
- [J5]. C. Papaodysseus, P. Rousopoulos, F. Giannopoulos, S. Zannos, D. Arabadjis, M. Panagopoulos, E. Kalfa, C. Blackwell, S. Tracy, "Identifying the writer of ancient inscriptions and Byzantine codices. A novel approach", *Computer Vision and Image Understanding, Volume 121, Pages 57-73, April 2014* <http://www.sciencedirect.com/science/article/pii/S1077314214000101>
- [J6]. D. Arabadjis, F. Giannopoulos, C. Papaodysseus, S. Zannos, P. Rousopoulos, M. Panagopoulos, C. Blackwell, "New mathematical and algorithmic schemes for pattern classification with application to the identification of writers of important ancient documents", *Pattern Recognition, Volume 46, Issue 8, Pages 2278-2296, 2013*. <http://www.sciencedirect.com/science/article/pii/S0031320313000563>
- [J7]. C. Papaodysseus, D. Arabadjis, M. Exarchos, P. Rousopoulos, S. Zannos, M. Panagopoulos, L. Papazoglou-Manioudaki, "Efficient solution to the 3D problem of automatic wall paintings reassembly", *Computers and Mathematics with Applications, Volume 64, Issue 8, Pages 2712-2734, 2012* <http://www.sciencedirect.com/science/article/pii/S0898122112005147>
- [J8]. Dimitris Arabadjis, Panayiotis Rousopoulos, Constantin Papaodysseus, Michalis Exarhos, Michail Panagopoulos, *Member IEEE*, and Lena Papazoglou-Manioudaki, "Optimization in Differentiable Manifolds in Order to Determine the Method of Construction of Prehistoric Wall-Paintings", *IEEE Transactions on Pattern Analysis and Machine Intelligence, Volume 33, Issue 11, Page(s): 2229-2244, November, 2011* [Impact Factor: 4,378 (ISI Web of Knowledge)] http://ieeexplore.ieee.org/xpls/abs_all.jsp?arnumber=5740922
- [J9]. P. Rousopoulos, C. Papaodysseus, D. Arabadjis, M. Exarhos, M. Panagopoulos, "Reconstruction of c.1650 B.C. Fragmented Wall Paintings by Exploitation of the Thematic Content", *International Journal of Imaging and Robotics, 5- (11), pp. 1-7, 2011* <http://ceser.in/ceserp/index.php/iji/article/view/1096>
- [J10]. Roussopoulos P., Papaodysseus C., Arabadjis D., Exarhos M., and Panagopoulos M., "Image and pattern analysis for the determination of the method of drawing celebrated thera wall-paintings circa 1650 B.C." *ACM, Journal on Computing and Cultural Heritage, Vol. 3, Issue 2, p.p. 1-21, Sep. 2010* <http://portal.acm.org/citation.cfm?id=1841318>
- [J11]. D. Arabadjis, C. Papaodysseus, P. Rousopoulos, M. Panagopoulos "On The Mathematical Formulation Of The Problem Of Reassembling Fragmented Objects: Two New Theorems", *Journal of Applied Mathematics and Computing (Springer), Volume 34, Numbers 1-2, 81-100, 2010* <http://www.springerlink.com/content/75mq4q8734719387/>
- [J12]. M. Panagopoulos, C. Papaodysseus, P. Roussopoulos, D. Dafi, S. Tracy "Automatic writer identification of ancient Greek inscriptions" *IEEE Transactions on Pattern Analysis and Machine Intelligence, Volume 31, Issue 8, Page(s): 1404-1414, August, 2009* [Impact Factor: 4,378 (ISI Web of Knowledge)] http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=4586391
- [J13]. Arabadjis D, Rousopoulos P, Papaodysseus C, Panagopoulos M, Loumou P, Theodoropoulos G, "A General Methodology for the Determination of 2D Bodies Elastic Deformation Invariants. Application to the Automatic Identification of Parasites", *IEEE Transactions on Pattern Analysis and Machine Intelligence, Volume 32, Issue 5, Page(s): 799-814, May, 2009* [Impact Factor: 4,378 (ISI Web of Knowledge)] http://ieeexplore.ieee.org/xpls/abs_all.jsp?arnumber=4815258&tag=1
- [J14]. C. Papaodysseus, M. Exarhos, M. Panagopoulos, P. Roussopoulos, C. Triantafillou, Th. Panagopoulos "Image and Pattern Analysis for 1650 B.C. Wall Paintings Study And Reconstruction", *IEEE Transactions on*

- [J15]. C. Papaodysseus., M. Panagopoulos, P. Rousopoulos, G. Galanopoulos & C. Doumas “Geometric templates used in the Akrotiri (Thera) wall-paintings” *Antiquity, Volume 82, Number 316, Page 401-408, 2008* [Impact Factor: 1,065 (ISI Web of Knowledge)] <http://antiquity.ac.uk/ant/082/ant0820401.htm>
- [J16]. St. Tracy, C. Papaodysseus, P. Rousopoulos, M. Panagopoulos, D. Fragoulis, D.Dafi, Th. Panagopoulos. “Identifying Hands on Ancient Athenian Inscriptions: First Steps towards a Digital Approach”. *Archaeometry Vol. 49 Issue 4 Page 749 November 2007* [Impact Factor: 1,355 (ISI Web of Knowledge)] <http://onlinelibrary.wiley.com/doi/10.1111/j.1475-4754.2007.00333.x/abstract>
- [J17]. C. Papaodysseus, D. K. Fragoulis, M. Panagopoulos, T. Panagopoulos, P. Rousopoulos, M. Exarhos, and A. Skembris “Determination of the Method of Construction of 1650 B.C. Wall Paintings”, *IEEE Transactions on Pattern Analysis and Machine Intelligence, Vol. 28, NO. 9, September 2006* [Impact Factor: 4,378 (ISI Web of Knowledge)] http://ieeexplore.ieee.org/xpls/abs_all.jsp?arnumber=1661540&tag=1
- [J18]. D. Fragoulis., A. Skembris., C. Papaodysseus., P. Rousopoulos. , Th. Panagopoulos., M. Panagopoulos., C. Triantafyllou. , A. Vlachopoulos And C. Doumas “Origins and Application of Geometry in the Thera Prehistoric Civilization Ca. 1650 BC”, *Centaurus 2005: VOL. 47: PP. 316–340* <http://onlinelibrary.wiley.com/doi/10.1111/j.1600-0498.2005.00029.x/abstract>
- [J19]. D. Fragoulis, M. Exarhos., C. Papaodysseus., A. Skembris, P. Rousopoulos, M. Panagopoulos, G. Rousopoulos, Th. Panagopoulos, “A General Methodology for Timbre Determination and Identification with Application to Sax – Flute”, *WSEAS Transactions on Acoustics and Music, Issue 1, Vol.2, ISSN: 1109-9577, pp. 38-42, January 2005*

Conferences

- [C1] Sofia Vlachou, Michail Panagopoulos, “Studying the Instagram over-popularity of Frida Kahlo and Vincent van Gogh artworks”, *3rd Digital Culture and AudioVisual Challenges International Conference, Corfu 2021*
- [C2] Fotios Giannopoulos, Dimitris Arabadjis, Kyveli Kampouri, Panagiota Tsakalidou, Constantin Papaodysseus, Michail Panagopoulos, “A Novel Approach and the Related Information System for the Identification of the Writer of Historical Documents”, In: *Koui M., Zezza F., Kouis D. (eds) 10th International Symposium on the Conservation of Monuments in the Mediterranean Basin. MONUBASIN 2017. Springer, Cham*
- [C3] Panagiota Tsakalidou, Dimitris Arabadjis, Constantin Papaodysseus, Michalis Exarhos Panayiotis Rousopoulos, Fotios Giannopoulos, Evangelos Fotopoulos, Michail Panagopoulos, “Advanced Geometric Guides Were Used for the Drawing of Celebrated Late Bronze Age Wall Paintings”, In: *Koui M., Zezza F., Kouis D. (eds) 10th International Symposium on the Conservation of Monuments in the Mediterranean Basin. MONUBASIN 2017. Springer, Cham*
- [C4] Michail Panagopoulos and Constantine Kotropoulos, “Image tagging using tensor decomposition”, *International Conference on Information, Intelligence, Systems and Applications (IISA 2015), Corfu, Greece, July 6-8, 2015.*
- [C5] Michail Panagopoulos, Dimitris Arabadjis, Panayiotis Rousopoulos, Michalis Exarhos, Constantin Papaodysseus, “Identifying patterns on prehistoric wall paintings: A new curve fitting approach”, *43rd Conference in Computer Applications and Quantitative Methods in Archaeology, Sienna, Italy, 2015.*
- [C6] M. Panagopoulos, P. Rousopoulos, D. Arabadjis, M. Exarhos, and C. Papaodysseus, “Methods and Algorithms for the Automatic Identification of Writer of Ancient Documents”, in *Proceedings of the 1st Conference on Computer Applications and Quantitative Methods in Archaeology Greek Chapter (CAA-GR), Rethymno, Crete, 2014.*
- [C7] D. Arabadjis, C. Papaodysseus, S. Zannos, F. Giannopoulos, E. Kalfa, P. Rousopoulos, M. Panagopoulos, C. Blackwell, “A new approach for the identification of writers of important ancient documents”, *IEEE Proceedings of DSP 2013, Santorini, 2013* http://ieeexplore.ieee.org/xpls/abs_all.jsp?arnumber=6622801&tag=1
- [C8] P. Rousopoulos, M. Panagopoulos, C. Papaodysseus, F. Panopoulou, D. Arabadjis, S. Tracy, F. Giannopoulos, S. Zannos, “A New Approach For Ancient Inscriptions’ Writer Identification”, *IEEE Proceedings of DSP 2011, Corfu, 2011* http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=6004966
- [C9] Constantin Papaodysseus, Panayiotis Rousopoulos, Dimitris Arabadjis, Fivi Panopoulou , Michalis Panagopoulos, “Handwriting Automatic Classification: Application to Ancient Greek Inscriptions”, *IEEE 2010*

- [C10] M. Panagopoulos, P. Roussopoulos, D. Arabadjis, C. Papaodysseus, “Information system for graphological identification”, *IEEE Society Proceedings of Panhellenic Conference on Informatics, Corfu 2009*, <http://www.computer.org/portal/web/csdl/doi/10.1109/PCI.2009.23>
- [C11] Panayiotis Rousopoulos, Dimitris Arabadjis, Michalis Panagopoulos, Constantin Papaodysseus, Elena Papazoglou, “Determination of the Method of Drawing of Prehistoric Wall-Paintings via Original Methods of Pattern Recognition and Image Analysis”, *IEEE International Conference on Image Processing, Cairo, Egypt, 2009* http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=5413987
- [C12] M. Panagopoulos, P. Roussopoulos, C. Papaodysseus, D. Arabadjis, G. Galanopoulos and St. Tracy «An information system for graphological identification of writers of ancient Greek inscriptions» *5ο Συμπόσιο Αρχαιομετρίας της Ελληνικής Αρχαιομετρικής Εταιρείας, Αθήνα, Οκτώβριος 2008*
- [C13] D. Arabadjis, P. Rousopoulos, C. Papaodysseus, M. Panagopoulos, P. Loumou, G. Theodoropoulos «Determination of the Mechanoelastic Properties of Parasites via Analysis of their Microscopic Images» *IEEE International Conference on Bioinformatics and Bioengineering, Athens, October 2008*, http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=4696804
- [C14] C. Papaodysseus, D. Arabadjis, M. Panagopoulos, P. Rousopoulos, M. Exarhos and E. Papazoglou «Automated Reconstruction of Fragmented Objects Using Their 3D Representation - Application to Important Archaeological Finds» *IEEE 9th International Conference on Signal Processing (ICSP'08), Beijing, October 2008*, http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=5413987
- [C15] Κ. Παπαοδυσσεύς, Π. Ρουσόπουλος, Μ. Παναγόπουλος, Γ. Γαλανόπουλος, Δ. Φραγκούλης, Θ. Παναγόπουλος, Κ. Τριανταφύλλου «Εφαρμογή Προηγμένων Μεθόδων Επεξεργασίας Εικόνας, Αναγνώρισης Προτύπων και Πληροφορικής σε Αρχαιολογικά Ευρήματα», *Ημερίδα ‘Οι Νέες Τεχνολογίες στα Μουσεία’ Ελληνική Ομοσπονδία Σωματείων Φίλων των Μουσείων, Αθήνα, Ιούνιος 2007*
- [C16] Κ. Παπαοδυσσεύς, Μ. Παναγόπουλος, Π. Ρουσόπουλος, «Ανάπτυξη Μεθόδων Ψηφιακής Επεξεργασίας Εικόνων και Αναγνώρισης Προτύπων και Εφαρμογής τους σε Αρχαιολογικά Ευρήματα» *Ημερίδα ‘Οι Νέες Τεχνολογίες στις Αρχαιολογικές Επιστήμες’, Ρόδος, Οκτώβριος 2006*
- [C17] Κ. Παπαοδυσσεύς, Αθ. Παναγόπουλος, Γ. Ρουσόπουλος, Δ. Φραγκούλης, Μ. Παναγόπουλος, Α. Σκέμπρης, Π. Ρουσόπουλος, Γ. Γαλανόπουλος «Προηγμένα Γεωμετρικά Πρότυπα στις Τοιχογραφίες του Προϊστορικού Οικισμού Ακρωτηρίου Σαντορίνης», *2ο Διεθνές Συνέδριο Αρχαίας Ελληνικής Τεχνολογίας ΤΕΕ, Οκτώβριος 2005*
- [C18] D. Fragoulis, M. Exarhos, C. Papaodysseus, A. Skembris, P. Roussopoulos, M. Panagopoulos, and G. Roussopoulos, “Determination and Automated Classification of Sax–Flute Timbre,” in *6th WSEAS Int.Conf.on Acoustics and Music: Theory and Applications (AMTA '05)*, 2005

Selected Citations

J5

1. Cilia, N. D., C. De Stefano, F. Fontanella, C. Marrocco, M. Molinara, and A. Scotto Di Freca. “An End-to-End Deep Learning System for Medieval Writer Identification.” *Pattern Recognition Letters* 129 (January 1, 2020): 137–43. <https://doi.org/10.1016/j.patrec.2019.11.025>.
2. Cilia, Nicole D., Claudio De Stefano, Francesco Fontanella, Mario Molinara, and Alessandra Scotto di Freca. “What Is the Minimum Training Data Size to Reliably Identify Writers in Medieval Manuscripts?” *Pattern Recognition Letters* 129 (January 1, 2020): 198–204. <https://doi.org/10.1016/j.patrec.2019.11.030>.
3. Cilia, Nicole Dalia, Claudio De Stefano, Francesco Fontanella, Claudio Marrocco, Mario Molinara, and Alessandra Scotto di Freca. “An Experimental Comparison between Deep Learning and Classical Machine Learning Approaches for Writer Identification in Medieval Documents.” *Journal of Imaging* 6, no. 9 (September 2020): 89. <https://doi.org/10.3390/jimaging6090089>.
4. De Stefano, C., M. Maniaci, F. Fontanella, and A. Scotto di Freca. “Reliable Writer Identification in Medieval Manuscripts through Page Layout Features: The ‘Avila’ Bible Case.” *Engineering Applications of Artificial Intelligence* 72 (June 1, 2018): 99–110. <https://doi.org/10.1016/j.engappai.2018.03.023>.

5. Haliassos, Alexandros, Panagiotis Barmpoutis, Tania Stathaki, Stephen Quirke, and Anthony Constantinides. "Classification and Detection of Symbols in Ancient Papyri." In *Visual Computing for Cultural Heritage*, edited by Fotis Liarokapis, Athanasios Voulodimos, Nikolaos Doulamis, and Anastasios Doulamis, 121–40. *Springer Series on Cultural Computing*. Cham: Springer International Publishing, 2020. https://doi.org/10.1007/978-3-030-37191-3_7.
6. Matsumoto, Mallory E. "Archaeology and Epigraphy in the Digital Era." *Journal of Archaeological Research* 30, no. 2 (June 1, 2022): 285–320. <https://doi.org/10.1007/s10814-021-09162-4>.
7. Popović, Mladen, Maruf A. Dhali, and Lambert Schomaker. "Artificial Intelligence Based Writer Identification Generates New Evidence for the Unknown Scribes of the Dead Sea Scrolls Exemplified by the Great Isaiah Scroll (1QIsaa)." *ArXiv:2010.14476 [Cs]*, October 27, 2020. <http://arxiv.org/abs/2010.14476>.
8. Shin, Jungpil, Md Maniruzzaman, Yuta Uchida, Md Al Mehedi Hasan, Akiko Megumi, Akiko Suzuki, and Akira Yasumura. "Important Features Selection and Classification of Adult and Child from Handwriting Using Machine Learning Methods." *Applied Sciences* 12, no. 10 (January 2022): 5256. <https://doi.org/10.3390/app12105256>.
9. V. Aubin, M. Mora, and M. Santos-Peñas, "Off-line writer verification based on simple graphemes," *Pattern Recognition*, vol. 79, pp. 414–426, Jul. 2018.
10. S. He, P. Samara, J. Burgers, and L. Schomaker, "Image-based historical manuscript dating using contour and stroke fragments," *Pattern Recognition*, vol. 58, pp. 159–171, Oct. 2016.
11. B. Sober and D. Levin, "Computer Aided Restoration of Handwritten Character Strokes," *arXiv:1602.07038 [cs, math]*, Feb. 2016.
12. S. He, P. Samara, J. Burgers, and L. Schomaker, "Historical manuscript dating based on temporal pattern codebook," *Computer Vision and Image Understanding*, vol. 152, pp. 167–175, Nov. 2016.
13. Aswatha, S.M., Talla, A.N., Mukhopadhyay, J., Bhowmick, P., "A Method for Extracting Text from Stone Inscriptions Using Character Spotting", in: *Jawahar, C.V., Shan, S. (Eds.), Computer Vision - ACCV 2014 Workshops, Lecture Notes in Computer Science. Springer International Publishing, pp. 598–611, 2014*

J6

14. Aubin, Verónica, Matilde Santos, and Marco Mora. "Off-Line Writer Verification Using Segments of Handwritten Samples and SVM." In *13th International Conference on Computational Intelligence in Security for Information Systems (CISIS 2020)*, edited by Álvaro Herrero, Carlos Cambra, Daniel Urda, Javier Sedano, Héctor Quintián, and Emilio Corchado, 57–65. *Advances in Intelligent Systems and Computing*. Cham: Springer International Publishing, 2021. https://doi.org/10.1007/978-3-030-57805-3_6.
15. Chahi, Abderrazak, Youssef El merabet, Yassine Ruichek, and Raja Touahni. "Cross Multi-Scale Locally Encoded Gradient Patterns for off-Line Text-Independent Writer Identification." *Engineering Applications of Artificial Intelligence* 89 (March 1, 2020): 103459. <https://doi.org/10.1016/j.engappai.2019.103459>.
16. Abderrazak Chahi, Youssef El merabet, Yassine Ruichek, Raja Touahni "Local Gradient Full-Scale Transform Patterns Based off-Line Text-Independent Writer Identification." *Applied Soft Computing* 92 (July 1, 2020): 106277.
17. Y. Hannad, I. Siddiqi, C. Djeddi, and M. E.-Y. El-Kettani, "Improving Arabic writer identification using score-level fusion of textural descriptors," *IET Biometrics*, vol. 8, no. 3, pp. 221–229, Jan. 2019.
18. A. Chahi, Y. El merabet, Y. Ruichek, and R. Touahni, "An effective and conceptually simple feature representation for off-line text-independent writer identification," *Expert Systems with Applications*, vol. 123, pp. 357–376, Jun. 2019.
19. P. Singh, P. P. Roy, and B. Raman, "Writer identification using texture features: A comparative study," *Computers & Electrical Engineering*, vol. 71, pp. 1–12, Oct. 2018.
20. A. Chahi, I. El khadiri, Y. El merabet, Y. Ruichek, and R. Touahni, "Block wise local binary count for off-Line text-independent writer identification," *Expert Systems with Applications*, vol. 93, pp. 1–14, Mar. 2018.
21. Hannad, Y., Siddiqi, I., El Kettani, M.E.Y., "Writer identification using texture descriptors of handwritten fragments", *Expert Systems with Applications* 47, 14–22. doi:10.1016/j.eswa.2015.11.002, 2016

J7

22. Jo, Young Hoon, Seonghyuk Hong, Seong Yeon Jo, and Yoon Mi Kwon. "Noncontact Restoration of Missing Parts of Stone Buddha Statue Based on Three-Dimensional Virtual Modeling and Assembly

Simulation.” *Heritage Science* 8, no. 1 (October 21, 2020): 103. <https://doi.org/10.1186/s40494-020-00450-8>.

23. Marlinda, Linda, Faruq Aziz, Widiyawati Widiyawati, and Wahyu Indrarti. “Image Stitching Using A-Kaze Algorithm for Borobudur Panoramic on Based Feature.” *JISAMAR (Journal of Information System, Applied, Management, Accounting and Research)* 5, no. 4 (November 4, 2021): 1035–43. <https://doi.org/10.52362/jisamar.v5i4.608>.
24. Sun, Jin, Yu Ding, Xinglong Zhu, Juntong Xi, and Yu-Dong Zhang. “Extended Gaussian Sphere and Similarity Fusion Method for Reassembly of 3D Cultural Relics.” *Multimedia Tools and Applications* 79, no. 41 (November 1, 2020): 30187–203. <https://doi.org/10.1007/s11042-020-09535-9>.
25. Pintus, R., Pal, K., Yang, Y., Weyrich, T., Gobbetti, E., Rushmeier, H., “A Survey of Geometric Analysis in Cultural Heritage”. *Computer Graphics Forum*, 2015
26. A. Schäfer, G. Bock, J. Sanday, and H. Lette, “Virtually reassembling Angkor-style Khmer temples,” *Digital Applications in Archaeology and Cultural Heritage*, vol. 2, no. 1, pp. 2–11, 2015.
27. M. J. N. Nada A Rasheed, “A Survey of Computer Methods in Reconstruction of 3D Archaeological Pottery Objects,” *International Journal of Advanced Research*, vol. 3, no. 3, pp. 712–714, 2015.
28. Altantsetseg Enkhbayar, Matsuyama Katsutsugu, Konno Kouichi, “Pairwise matching of 3D fragments using fast fourier transform”, *The Visual Computer*, Springer Berlin Heidelberg, 1-10, 2014
29. R. Pintus and Dellepiane, Matteo, “Geometric Analysis in Cultural Heritage,” in *12th EUROGRAPHICS Workshop on Graphics and Cultural Heritage (GCH)*, 2014.
30. L. S. Yu, H. J. Ku, C. L. Ting, R. I. Chang, Y. C. Wang, and J. M. Ho, “Content-Based Feature Matching for Fragment Reassembly of Ceramic Reconstruction,” in *2014 IEEE/WIC/ACM International Joint Conferences on Web Intelligence (WI) and Intelligent Agent Technologies (IAT)*, vol. 3, pp. 344–351, 2014.

J9

31. Md Jan Nordin and Nada A. Rasheed, “Reconstruction of Ancient Two-Dimensional Objects,” *Int’l Journal of Computing, Communications & Instrumentation Engg. (IJCCIE)*, vol. 3, no. 2, pp. 224–228, 2016.
32. Kotoula, Eleni, “Semiautomatic Fragments Matching And Virtual Reconstruction: A Case Study On Ceramics,,” *International Journal of Conservation Science*, vol. 7, no. 1, pp. 71–86, Mar. 2016.
33. N. A. Rasheed and M. J. Nordin, “A survey of classification and reconstruction methods for the 2D archaeological objects,” in *2015 International Symposium on Technology Management and Emerging Technologies (ISTMET)*, pp. 142–147, 2015.
34. Nada A Rasheed, M.J.N., “Archaeological Fragments Classification Based On RGB Color and Texture Features”, *Journal of Theoretical and Applied Information Technology*, Vol 76, 3, 358–365, 2015.

J10

35. Zhang, Xiuqing, and Zhihua Zhang. “Research on Automatic Color Enhancement Method of Interior Wall Drawing Pattern Based on Sparse Representation Assisted by Matlab Software.” *Journal of Physics: Conference Series* 1744, no. 4 (February 2021): 042041. <https://doi.org/10.1088/1742-6596/1744/4/042041>.
36. A. Burcoff and L. Shamir, “Computer Analysis of Pablo Picasso’s Artistic Style,” *International Journal of Art, Culture and Design Technologies (IJACDT)*, vol. 6, no. 1, pp. 1–18, Jan. 2017.
37. L. Shamir, J. Nissel, and E. Winner, “Distinguishing Between Abstract Art by Artists vs. Children and Animals: Comparison Between Human and Machine Perception,” *ACM Trans. Appl. Percept.*, vol. 13, no. 3, p. 17:1–17:17, May 2016.
38. L. Shamir, “What makes a Pollock Pollock: a machine vision approach,” *International Journal of Arts and Technology*, vol. 8, no. 1, pp. 1–10, Jan. 2015.
39. S. Kaur and A. Kaur, “Restoration of Historical Wall Paintings Using Improved Nearest Neighbour Algorithm,” *International Journal Of Engineering And Computer Science*, vol. 3, no. 12, pp. 9581–9586, Dec. 2014
40. Shamir, L., Tarakhovsky, J.A., “Computer analysis of art”, *Journal of Computing and Cultural Heritage*, Volume 5, Issue 2, art. no. 7, ACM, July 2012

J11

41. Liu, E., X. Cheng, X. Cheng, T. Zhou, and Y. Huang. “Application of Three-Dimensional Laser Scanning in the Protection of Multi-Dynasty Ceramic Fragments.” *IEEE Access* 8 (2020): 139771–80. <https://doi.org/10.1109/ACCESS.2020.3012438>.
42. M. J. N. Nada A Rasheed, “A Survey of Computer Methods in Reconstruction of 3D Archaeological Pottery Objects,” *International Journal of Advanced Research*, vol. 3, no. 3, pp. 712–714, 2015.

43. Assael, Yannis, Thea Sommerschild, Brendan Shillingford, Mahyar Bordbar, John Pavlopoulos, Marita Chatzipanagiotou, Ion Androutsopoulos, Jonathan Prag, and Nando de Freitas. "Restoring and Attributing Ancient Texts Using Deep Neural Networks." *Nature* 603, no. 7900 (March 2022): 280–83. <https://doi.org/10.1038/s41586-022-04448-z>.
44. Banning, Edward B. "Systematics: Classification and Grouping." In *The Archaeologist's Laboratory: The Analysis of Archaeological Evidence*, edited by Edward B. Banning, 23–41. *Interdisciplinary Contributions to Archaeology*. Cham: Springer International Publishing, 2020. https://doi.org/10.1007/978-3-030-47992-3_3.
45. Faigenbaum-Golovin, Shira, Arie Shaus, Barak Sober, Yana Gerber, Eli Turkel, Eli Piasetzky, and Israel Finkelstein. "Literacy in Judah and Israel: Algorithmic and Forensic Examination of the Arad and Samaria Ostraca." *Near Eastern Archaeology* 84, no. 2 (June 2021): 148–58. <https://doi.org/10.1086/714070>.
46. Haliassos, Alexandros, Panagiotis Barmpoutis, Tania Stathaki, Stephen Quirke, and Anthony Constantinides. "Classification and Detection of Symbols in Ancient Papyri." In *Visual Computing for Cultural Heritage*, edited by Fotis Liarokapis, Athanasios Voulodimos, Nikolaos Doulamis, and Anastasios Doulamis, 121–40. *Springer Series on Cultural Computing*. Cham: Springer International Publishing, 2020. https://doi.org/10.1007/978-3-030-37191-3_7.
47. Heenkenda, H. M. S. C. R., and T. G. I. Fernando. "Approaches Used to Recognise and Decipher Ancient Inscriptions: A Review." *Vidyodaya Journal of Science* 23, no. 02 (2020). <https://doi.org/10.31357/vjs.v23i02.4792>.
48. Sapirstein, Philip. "Segmentation, Reconstruction, and Visualization of Ancient Inscriptions in 2.5D." *J. Comput. Cult. Herit.* 12, no. 2 (April 2019): 15:1–15:30. <https://doi.org/10.1145/3286977>.
49. Pandey P., Seeja K.R., "Forensic Writer Identification with Projection Profile Representation of Graphemes". In: Somani A., Srivastava S., Mundra A., Rawat S. (eds) *Proceedings of First International Conference on Smart System, Innovations and Computing. Smart Innovation, Systems and Technologies, vol 79. Springer, Singapore 2018*.
50. Zhang, X., Nagy, G., "Computational method for calligraphic style representation and classification", *Journal of Electron. Imaging* 24, 053003–053003, 2015, [doi:10.1117/1.JEI.24.5.053003](https://doi.org/10.1117/1.JEI.24.5.053003)
51. H. Zhu, X. Lin, Y. Zhang, and R. Lu, "Duth: a user-friendly dual-factor authentication for Android smartphone devices," *Security Comm. Networks, p. n/a–n/a, Jul. 2014*.
52. A. J. Newell and L. D. Griffin, "Writer identification using oriented Basic Image Features and the Delta encoding," *Pattern Recognition, vol. 47, no. 6, pp. 2255–2265, Jun. 2014*.
53. Markus Diem, Florian Kleber, Stefan Fiel, Robert Sablatnig, "Semi-automated document image clustering and retrieval", *Proc. SPIE 9021, Document Recognition and Retrieval XXI, 90210M, December 27, 2013*.
54. Roni Shweka, Yaacov Choueka, Lior Wolf, and Nachum Dershowitz "Automatic extraction of catalog data from digital images of historical manuscripts", *Literary and Linguist Computing*, first published online February 23, 2013
55. Sameh M. Awaida & Sabri A. Mahmoud, "Writer Identification Of Arabic Text Using Statistical And Structural Features", *Cybernetics and Systems: An International Journal*, 44:1, 57-76, 2013
56. Jun Tan, Wen- Xian Wang, Min-Shui Feng, Xiao-Xiong Zuo, "A new Approach Based on Ncut Clustering Algorithm for Signature Segmentation", *AASRI Procedia Conference on Computational Intelligence and Biometrics, Volume 1, Pages 14-20, 2012*
57. Galanopoulos G., Papaodysseus C., Arabadjis D., Exarchos M., "Exploiting 3D digital representations of ancient inscriptions to identify their writer", *Lecture Notes in Computer Science, Advances in Visual Computing, Springer Berlin, pp.188-198, 2012*
58. Awaida Sameh M., Mahmoud Sabri A., "State of the art in off-line writer identification of handwritten text and survey of writer identification of Arabic text", *Educational Research and Reviews, Vol 7(20), pp. 445-463, July 2012*
59. Tan, J., Lai, H.-H., Wang, C-D., Wang, W.-X., Zuo, X.-X., "A new handwritten character segmentation method based on nonlinear clustering", *Neurocomputing, Volume 89, Pages 213-219, July 2012*

60. Kore, S., Apte, S., “The current state of art – Handwriting a behavioral biometric for person identification and verification”, *ACM International Conference on Advances in Computing, Communications and Informatics, ICACCI 2012*
61. Tan, J., Lai, J.-H., Zuo, X.-X., “The dataset system of Economic Dispute handwritten (DSEDH) based on stroke shape and structure features”, in: *2012 21st International Conference on Pattern Recognition (ICPR). Presented at the 2012 21st International Conference on Pattern Recognition (ICPR)*, pp. 661–664, 2012
62. Franz Fischer, Christiane Fritze, and Georg Vogeler, editors. *Kodikologie und Paläographie im Digitalen Zeitalter 2 – Codicology and Palaeography in the Digital Age 2. Schriften des Instituts für Dokumentologie und Editorik, 3. Books on Demand, Norderstedt, 2011*
63. Wolf, L., Litwak, L., Dershowitz, N., Shweka, R., Choueka, Y., “Active clustering of document fragments using information derived from both images and catalogs”, *IEEE International Conference on Computer Vision (ICCV), 2011*
64. Lior Wolf, Nachum Dershowitz, Liza Potikha, Tanya German, Roni Shweka, and Yaacov Choueka, “Automatic Paleographic Exploration of Genizah Manuscripts”, in *Kodikologie und Paläographie im Digitalen Zeitalter 2 - Codicology and Palaeography in the Digital Age 2*, Franz Fischer, Christiane Fritze, and Georg Vogeler, eds., with Bernhard Assmann, Malte Rehbein, and Patrick Sahle, *Schriften des Instituts für Dokumentologie und Editorik, vol. 3, Norderstedt: Books on Demand, Germany, pp. 157-179, 2011*
65. Jun Tan, Jian-Huang Lai, Chang-Dong Wang, Ming-Shuai Feng, “A Stroke Shape and Structure Based Approach for Off-line Chinese Handwriting Identification”, *International Journal of Intelligent Systems and Applications, Vol.3, No.2, PP.1-8, March 2011*
66. Wolf, L., Potikha, L., Dershowitz, N., Shweka, R., Choueka, Y., “Computerized paleography: Tool for historical manuscripts”, *18th IEEE International Conference on Image Processing, 2011*
67. Emma Dalton, Nicholas R. Howe, “Style-based retrieval for ancient Syriac manuscripts”, *HIP '11: ACM Publishing, Proceedings of the 2011 Workshop on Historical Document Imaging and Processing, 2011*
68. L. Potikha, “Computerized Paleography Exploration of Historical Manuscripts,” *Thesis, 2011.*
69. Lior Wolf, Rotem Littman, Naama Mayer, Tanya German, Nachum Dershowitz, Roni Shweka and Yaacov Choueka, “Identifying Join Candidates in Cairo Genizah”, *International Journal of Computer Vision, Springer, Volume 94, Issue 1, Pages 118-135, August 2011*
70. Jun Tan, Jian-Huang Lai, Chang-Dong Wang, Ming-Shuai Feng, “Off-Line Chinese Handwriting Identification Based on Stroke Shape and Structure”, *2nd International Conference on Information Engineering and Computer Science (ICIECS), 2010*
71. Lior Wolf, Rotem Littman, Naama Mayer, Nachum Dershowitz, Roni Shweka, Yaacov Choueka, “Automatically Identifying Join Candidates in the Cairo Genizah”, *IEEE International Conference on Computer Vision Workshops (ICCV Workshop on eHeritage and Digital Art Preservation), Kyoto, Japan, October 2009.*

J14

72. Dondi, Piercarlo, Luca Lombardi, and Alessandra Setti. “DAFNE: A Dataset of Fresco Fragments for Digital Anastlylosis.” *Pattern Recognition Letters 138 (October 1, 2020): 631–37.* <https://doi.org/10.1016/j.patrec.2020.09.015>.
73. Markaki, Smaragda, and Costas Panagiotakis. “Jigsaw Puzzle Solving Techniques and Applications: A Survey.” *The Visual Computer, July 9, 2022.* <https://doi.org/10.1007/s00371-022-02598-9>.
74. Xu, Guanlei, Xiaogang Xu, and Xiaotong Wang. “Generalized Amplitude-Phase Demodulation for Isotropic Image Decomposition and Analysis.” *Digital Signal Processing 122 (April 15, 2022): 103372.* <https://doi.org/10.1016/j.dsp.2021.103372>.
75. X. Guanlei, W. Xiaotong, Z. Lijia, and X. Xiaogang, “Image decomposition and texture analysis via combined bi-dimensional Bedrosian’s principles,” *IET Image Processing, vol. 12, no. 2, pp. 262–273, Sep. 2017.*
76. R. Lotus, J. Varghese, and S. Saudia, “An Approach to Automatic Reconstruction of Apictorial Hand Torn Paper Document,” *The International Arab Journal of Information Technology, vol. 13, no. 4, pp. 457–461, 2016.*
77. Garewal, R.K., Parsai, P.M.P., “Restoration of Digitized Image of Cracked Paintings - A Review”, *International Journal for Scientific Research and Development 3, 2524–2526, 2015.*
78. Kaur, S., Kaur, A., “Restoration of Historical Wall Paintings Using Improved Nearest Neighbour Algorithm”, *International Journal Of Engineering And Computer Science 3, 9581–9586, 2014.*

79. Aribi, Tohid, "Mathematically Transforming Recursive Method For Forming Parameterized Original LCIS Higher Level Systems," *Projournal of Engineering Research*, vol. 1, pp. 1–6, 2013.
80. Karianakis, N.; Maragos, P., "An integrated system for digital restoration of prehistoric Theran wall paintings," *Digital Signal Processing (DSP)*, 2013 18th International Conference on , pp.1,6, 1-3 July 2013 doi: 10.1109/ICDSP.2013.6622838
81. Y. Wu, L. Xin, L. Maoqing, "Color and contour based reconstruction of fragmented image", *Proceedings of the 8th International Conference on Computer Science and Education (ICCSE)*, 2013
82. Panetta K., Agaian S., Yicong Zhou, Wharton, E.J., "Parameterized Logarithmic Framework for Image Enhancement", *IEEE Transactions on Systems Man and Cybernetics, Part B: Cybernetics, Volume: 41, Issue: 2, April 2011*

J15

83. Foster, Karen Polinger. "Psychedelic Art and Ecstatic Visions in the Aegean." *In The Routledge Companion to Ecstatic Experience in the Ancient World*. Routledge, 2021.
84. Panagiotaki, Marina, Ilias Tomazos, and Fotios Papadimitrakopoulos, eds. *Cutting-Edge Technologies in Ancient Greece: Materials Science Applied to Trace Ancient Technologies in the Aegean World*. Hardback. Philadelphia: Oxbow Books, 2020.
85. A. C. Sparavigna and M. M. Baldi, "Flower of Life, Six-Fold Symmetry and Honeycomb Packing of Circles in the Mycenaean Geometry," *Social Science Research Network*, Rochester, NY, SSRN Scholarly Paper ID 2756099, Mar. 2016.
86. A. C. Sparavigna and M. M. Baldi, "A Minoan Geometry for Bisecting and Trisecting the Right Angle," *Social Science Research Network*, Rochester, NY, SSRN Scholarly Paper ID 2754536, Mar. 2016.
87. H. Shin, C. Doumas, T. Funkhouser, S. Rusinkiewicz, K. Steiglitz, A. Vlachopoulos, T. Weyrich, "Analyzing and simulating fracture patterns of theran wall paintings", *Journal on Computing and Cultural Heritage, Volume 5, Issue 3, 2012*
88. H. Shin, C. Doumas, T. Funkhouser, S. Rusinkiewicz, K. Steiglitz, A. Vlachopoulos, T. Weyrich, "Analyzing Fracture Patterns in Theran Wall Paintings", *The 11th International Symposium on Virtual Reality, Archaeology and Cultural Heritage VAST 2010*

J16

89. Matsumoto, Mallory E. "Archaeology and Epigraphy in the Digital Era." *Journal of Archaeological Research* 30, no. 2 (June 1, 2022): 285–320. <https://doi.org/10.1007/s10814-021-09162-4>.
90. Pitt, R.K., "Recent discoveries & resources in Athenian epigraphy", *Archaeological Reports* 61, 49–55. doi:10.1017/S057060841500006X, 2015
91. Galanopoulos G., Papaodysseus C., Arabadjis D., Exarchos M., "Exploiting 3D digital representations of ancient inscriptions to identify their writer", *Lecture Notes in Computer Science, Advances in Visual Computing, Springer Berlin*, pp.188-198, 2012
92. Seitz, M.C., "Towards Chilean Spanish language diachronic corpus", *RLA (Revista de Linguística Teórica y Aplicada)*, Volume 47, Issue 2, Pages 111-134, 2009
93. Tracy, S.V, Papaodysseus, C. "The study of hands on Greek inscriptions: The need for a digital approach", *American Journal of Archaeology, Volume 113, Issue 1, January 2009, Pages 99-102*

J17

94. Wenger, Tibor. "History of Saffron." *Longhua Chinese Medicine* 5 (June 2022): 15–15. <https://doi.org/10.21037/lcm-21-67>.
95. A. Brachmann and C. Redies, "Computational and Experimental Approaches to Visual Aesthetics," *Front. Comput. Neurosci.*, vol. 11, 2017.
96. L. Zhang, J. Sun, H. Song, and Y. Shen, "Normal direction local binary pattern for fragment reconstruction," in *IEEE International Conference on Multimedia and Expo (ICME)*, pp. 481–486, 2017.
97. Li, J.; Yao, L.; Hendriks, E.; Wang, J.; "Rhythmic Brushstrokes Distinguish van Gogh from His Contemporaries: Findings via Automated Brushstroke Extraction", *IEEE Transactions on Pattern Analysis and Machine Intelligence, Volume 34, Issue 6, Page(s): 1179-1176, 2012*
98. Seyedeh Zeinab Mousavi, Seyedeh Zahra Bathaie, "Historical uses of saffron: Identifying potential new avenues for modern research", *Avicenna Journal of Phytomedicine, Vol. 1, No. 2, 57-66, Autumn 2011*
99. "Recent publications," *BSHM Bulletin: Journal of the British Society for the History of Mathematics*, vol. 22, no. 1, pp. 72–76, Jan. 2007.
100. Bevil R. Conway and Margaret S. Livingstone, "Perspectives on science and art", *Current Opinion in Neurobiology, Volume 17, Issue 4, Pages 476-482, Elsevier, August 2007*

101. E. Frolov and I. Oseledets, "Tensor Methods and Recommender Systems," *arXiv:1603.06038 [cs, stat]*, Mar. 2016.

C8

102. Aswatha, S.M., Talla, A.N., Mukhopadhyay, J., Bhowmick, P., "A Method for Extracting Text from Stone Inscriptions Using Character Spotting", *Jawahar, C.V., Shan, S. (Eds.), Computer Vision - ACCV 2014 Workshops, Lecture Notes in Computer Science. Springer International Publishing, pp. 598–611, 2014.*

C9

103. V. Rajan, "Quantifying scripts: Defining metrics of characters for quantitative and descriptive analysis," *Digital Scholarship Humanities, vol. 32, no. 3, pp. 602–631, Sep. 2017.*

104. Aswatha, S.M., Talla, A.N., Mukhopadhyay, J., Bhowmick, P., "A Method for Extracting Text from Stone Inscriptions Using Character Spotting", *Jawahar, C.V., Shan, S. (Eds.), Computer Vision - ACCV 2014 Workshops, Lecture Notes in Computer Science. Springer International Publishing, pp. 598–611, 2014.*

105. Ibrahim, A.S., Youssef, A.E., Abbott, A.L., "Global vs. local features for gender identification using Arabic and English handwriting", *IEEE International Symposium on Signal Processing and Information Technology (ISSPIT). pp. 000155–000160. doi:10.1109/ISSPIT.2014.7300580, 2014*

106. Amira E. Youssef, Ahmed S. Ibrahim, and A. Lynn Abbott, "Automated Gender Identification for Arabic and English Handwriting," in *IET Conference Proceedings. The Institution of Engineering & Technology, 2013.*

C10

107. Thomas, Sheetal, Mridula Goel, Anmol Agarwal, and Asadali Abbas Hazariwala. "Application of Machine Learning to Detect Neuroticism in Individuals Using Handwriting Analysis." In *ICDSMLA 2020*, edited by Amit Kumar, Sabrina Senatore, and Vinit Kumar Gunjan, 521–31. Lecture Notes in Electrical Engineering. Singapore: Springer, 2022. https://doi.org/10.1007/978-981-16-3690-5_46.

C11

108. Chaudhary, Kavita. "DIGITAL RESTORATION OF DAMAGED MURAL IMAGES," 2016. <http://dspace.dtu.ac.in:8080/jspui/handle/repository/16528>.

109. Mandal, Pratap Chandra. "A Survey of Detection and Removal of Crack from Digital Painting." *International Journal of Advanced Research in Computer Science and Software Engineering*, 2015.

110. Garewal, R.K., Parsai, P.M.P., "Restoration of Digitized Image of Cracked Paintings - A Review", *International Journal for Scientific Research and Development* 3, 2524–2526, 2015.

111. S. Kaur and A. Kaur, "Restoration of Historical Wall Paintings Using Improved Nearest Neighbour Algorithm," *International Journal Of Engineering And Computer Science, vol. 3, no. 12, pp. 9581–9586, Dec. 2014.*

112. Apellániz, Juan María, and Imanol Amayra, "La atribución de la autoría de las figuraciones paleolíticas: Avances metodológicos desde la Prehistoria y la Psicología Cognitiva", *Vol. 22. Universidad de Deusto, 2014.*

REVIEWER IN INTERNATIONAL JOURNALS

- Journal of Engineering Technology Innovation
- Journal of Archaeological Science
- Journal of Electronic Imaging
- Optical Engineering
- Pattern Recognition
- Transactions on Pattern Analysis and Machine Intelligence
- Journal of Knowledge and Information Systems
- Heritage, MDPI
- Future Internet, MDPI
- Machines, MDPI
- Electronics, MDPI

REVIEWER IN INTERNATIONAL CONFERENCES

- Computer Applications and Quantitative Methods in Archaeology (CAA) Conference

- ICCCT: International Conference on Computer and Communication Technology
- EETN Conference on Artificial Intelligence (SETN)
- International Virtual Conference on Visual Pattern Extraction and Recognition for Cultural Heritage Understanding (VIPERC)
- EUTIC Conference

SCIENTIFIC BOOKS REVIEW

- ΨΗΦΙΑΚΗ ΣΧΕΔΙΑΣΗ Δ' ΕΚΔΟΣΗ, Morris Mano, Εκδόσεις Παπασωτηρίου, 2009

Scientific review of the Greek edition of the book "DIGITAL DESIGN", M. Morris Mano, Michael D. Ciletti, 4th Edition, Prentice Hall

- ΨΗΦΙΑΚΗ ΣΧΕΔΙΑΣΗ Ε' ΕΚΔΟΣΗ, Morris Mano, Michael Ciletti, Εκδόσεις Παπασωτηρίου, 2013

Scientific review of the Greek edition of the book "DIGITAL DESIGN", M. Morris Mano, Michael D. Ciletti, 5th Edition, Prentice Hall

BOOK CHAPTERS

- 1) Chapter title: "Chapter 7: Automatic Identification of the Writer of Ancient Greek Inscriptions, Employing Methods of Computer Engineering and Mathematics", Constantin Papaodysseus, Michail Panagopoulos, Panayotis Rousopoulos, Dimitris Arabadjis, Fivi Panopoulou, Solomon Zannos, Fotios Giannopoulos, Steven Tracy, Book: "Pattern Recognition and Signal Processing in Archaeometry: Mathematical and Computational Solutions for Archaeology", IGI Global - Hershey, PA, USA, 2012
- 2) Chapter title: "Chapter 3: A Digital Investigation Manifesting use of Geometric Stencils for the Drawing of Akrotiri Thera Prehistoric Wall Paintings", Panayotis Rousopoulos, Dimitris Arabadjis, Mihalis Exarhos, Michail Panagopoulos, Georgios Galanopoulos, Afroditi Pantazi, Constantin Papaodysseus, Book: "Pattern Recognition and Signal Processing in Archaeometry: Mathematical and Computational Solutions for Archaeology", IGI Global - Hershey, PA, USA, 2012
- 3) Chapter title: «Chapter XXIII: Automatic Identification and Elastic Properties of Deformed Objects Using their Microscopic Images», τίτλος βιβλίου: «Handbook of Research on Advanced Techniques in Diagnostic Imaging and Biomedical Applications», εκδότης : «Medical Information Science Reference », 2009, συγγραφείς: C. Papaodysseus, P. Roussopoulos, D. Arabadjis, M. Panagopoulos, P. Loumou, G. Theodoropoulos.

WORKSHOPS

Participation at Dagstuhl Perspectives Workshop: "Computation and Paleography: Potentials and Limits", *Dagstuhl 18-21/9/2012*, <http://drops.dagstuhl.de/opus/volltexte/2013/3890/>

CONFERENCE ORGANAZATION

- International Conference on "Digital Culture & AudioVisual Challenges - Interdisciplinary Creativity in Arts and Technology" (DCAC 2021), Corfu, May 2022, <https://avarts.ionio.gr/dcac/> – Πρόεδρος του συνεδρίου
- International Conference on "Digital Culture & AudioVisual Challenges - Interdisciplinary Creativity in Arts and Technology" (DCAC 2021), Corfu, May 2021, <https://avarts.ionio.gr/dcac/> – Πρόεδρος του συνεδρίου
- International Conference on "Digital Culture & AudioVisual Challenges - Interdisciplinary Creativity in Arts and Technology" (DCAC 2019), Corfu, May 2019, <https://avarts.ionio.gr/dcac/> – Πρόεδρος του συνεδρίου

- International Conference on “Digital Culture & AudioVisual Challenges - Interdisciplinary Creativity in Arts and Technology” (DCAC 2018), Corfu, June 2018, <https://avarts.ionio.gr/dcac/> – Πρόεδρος του συνεδρίου
- Interdisciplinary Conference on “TABOO - TRANSGRESSION – TRANSCENDENCE in Art & Science”, Corfu, May 2017, <https://avarts.ionio.gr/ttt/2017/gr/>, - Μέλος της οργανωτικής επιτροπής
- 17th International Conference on “Digital Signal Processing”, Corfu, July 2011, <https://conferences.ionio.gr/dsp2011/> - Μέλος της οργανωτικής επιτροπής

ADMINISTRATION

- President of the 2nd International Conference on Digital Culture & Audiovisual Challenges 2019
- President of the 1st International Conference on Digital Culture & Audiovisual Challenges 2018
- Member of the Internship Committee of the Department of Audio and Visual Arts
- Member of the Coordination Committee of the Postgraduate Program “Audiovisual Arts at the Digital Era” <http://avarts.ionio.gr/ada/studies/committees/>
- President of the Ionian University Faculty Members Union (2016-2017)
- General Secretary of the Ionian University Faculty Members Union (2015-2016)

SCHOLARSHIPS – GRANTS

- ICCS (Institute of Communication and Computing Systems) Scholarship, years 2005-2008.
- John S. Latsis Public Benefit Foundation Grant for the original research project «Writer identification of ancient Greek inscriptions» (chosen, along with other 12, amongst 713 proposals).

LABORATORIES

- Organization of lab exercises for Microprocessors (I.E.K. Kalamakiou).
- Lab exercises for *Computer Application Development* Laboratory (School of Naval Architecture and Marine Engineering, NTUA)
- Lab exercises for *Introduction to Computer Science II* and *Introduction to Programming I* laboratories (Department of Audiovisual Arts, Ionian University).

MILITARY SERVICE

Completed: *February 2003 – February 2004*
KETΘ, 95 ΤΥΑΠΕΘ (Rhodes), KEYΠ (Lamia), ΕΠΥΕΘΑ (Athens)

MEMBERSHIPS

- Member of Technical Chamber of Greece (Membership Number: 97312)
- Member of *IEEE (Institute of Electrical and Electronics Engineers)* Membership Number: 90740914
- Member of *IEEE Computational Intelligence Society*
- Member of *IEEE Computer Society*

OTHER QUALIFICATIONS

- *Foreign Languages:* English (fluent), French (fluent).
- Water Polo Greek National Junior Champion, Vouliagmeni Nautical Club
- Car and Motorcycle Driving License
- Scuba Diving License
- Athens Classic Marathon finisher (2012)

SEMINARS

- Free University – Dimitri Nanopoulos: “Ten lesson on Cosmology”
- Free University – Marina Labraki Plaka: “History of Art”
- Free University – Vasilis Lambrinoudakis: “Museums”

International and National Press References

1. "MINERVA" The International review of ancient art & archaeology, MARTS- APRIL 2010, "Were stencils used to create wall paintings?"
2. «Ελευθεροτυπία», Πέμπτη 8 Απριλίου 2010, "Αναγνωρίστηκε το «χέρι» 9 ανώνυμων γραφών"
(<http://www.enet.gr/?i=news.el.article&id=149170>)
3. «Έθνος», Πέμπτη 8 Απριλίου 2010, "«Ξεκλείδωσαν» 32 αρχαίες επιγραφές"
(<http://www.ethnos.gr/article.asp?catid=11386&subid=2&pubid=10991015>)
4. «ΤΟ ΒΗΜΑ», Πέμπτη 8 Απριλίου 2010, "Οι αρχαίοι επιγραφολόγοι στο μικροσκόπιο της Ιστορίας"
(<http://www.tovima.gr/default.asp?pid=2&ct=4&artid=324411&dt=08/04/2010>)
5. «ΤΑ ΝΕΑ», Δευτέρα 6 Ιουλίου 2009, 'Αναγνώρισαν αρχαίες επιγραφές από τον γραφικό χαρακτήρα'
<http://www.tanea.gr/default.asp?pid=2&ct=4&artid=4525179>
6. «ΤΟ ΒΗΜΑ», Σάββατο 4 Ιουλίου 2009, 'Ηλεκτρονική ταυτοποίηση επιγραφών:
Πρόγραμμα υπολογιστή μπορεί να ανακαλύπτει τον δημιουργό τους και να τις χρονολογεί με ακρίβεια '
<http://www.tovima.gr/default.asp?pid=46&ct=33&artid=264063&dt=04/07/2009>
7. «Ελευθεροτυπία», Πέμπτη 25 Μαΐου 2006, 'Η ταυτότητα των αρχαίων γραφών'
http://archive.enet.gr/online/online_text/c=113,dt=25.05.2006,id=28610316
8. «ΤΟ ΒΗΜΑ», Τρίτη 23 Μαΐου 2006, 'Έλληνες επιστήμονες αναγνωρίζουν γραφείς αρχαίων επιγραφών'
9. «Ελευθεροτυπία», Κυριακή 7 Αυγούστου 2005, 'Είχαν οι αρχαίοι στένσιλ;'
http://archive.enet.gr/online/online_text/c=113,dt=07.08.2005,id=29645760

International and National press web portals references

1. The NewScientist, "Computer reveals stone tablet 'handwriting' in a flash", 2/7/2009 (<http://www.newscientist.com/article/dn17405-computer-reveals-stone-tablet-handwriting-in-a-flash.html>)
2. Epos Spectrum, "Was Buchstaben in Stein verraten", 7/7/2009, <http://www.gehirn-und-geist.de/artikel/1000588&z=798890>
3. Wiseenschaft , "Handschriftenanalyse von gemeißelten Inschriften", 7/7/2009, http://www.wissenschaft-aktuell.de/artikel/Handschriftenanalyse_von_gemeisselten_Inschriften1771015586131.html
4. hbnews, "Λογισμικό αναγνωρίζει το γραφικό χαρακτήρα σε λίθινες ελληνικές επιγραφές", 3/7/2009, <http://www.hbnews.gr/permalink/9463.html>
5. BRIGHT SIDE OF NEWS, "Computer attributes stone tablet writing to specific author" 7/3/2009, <http://www.brightsideofnews.com/news/2009/7/3/computer-attributes-stone-tablet-writing-to-specific-author.aspx>
6. Η ΕΝΗΜΕΡΩΣΗ, "CSI ΑρχαίαΑθήνα", 5/7/2009
7. in.gr, "Λογισμικό αναγνωρίζει το γραφικό χαρακτήρα σε λίθινες ελληνικές επιγραφές", 3/7/2009, <http://news.in.gr/science-technology/article/?aid=1029983>