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University of the Aegean

Department of Product and Systems Design Engineering
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PERSONAL INFORMATION

- *Date of Birth*: November 7, 1972 at Korydallos, Attica
- *Marital Status*: Married, two children.

AREAS OF SPECIALIZATION AND RESEARCH[†]

- *Computer-Aided Design for Manufacture**: Research, models design, development of representation techniques & algorithms for product design with manufacturing constraints. Research and development of methods for constructing planar developments of doubly-curved surfaces with applications to the manufacturing industry.
- *Geometric Modelling**: Mathematical models of curves & surfaces. Algorithms for drawing curves on surfaces. Isometric mapping of surface curves onto the plane and vice versa. Construction of smooth curves onto digital surfaces represented by non-structured clouds of points. Reconstruction of 3D solids from 2D sketches.
- *Computer-Aided Product and Structures Study/Analysis*: Finite Elements Method for study/analysis of product/structures and optimal design for manufacture. Product quality evaluation and visual inspection.
- *Reverse Engineering**: Geometric reconstruction of three-dimensional surfaces from unstructured and range clouds of points. Image segmentation. Geometric reconstruction of objects from digital images. Parameterization and Reverse Engineering of unstructured clouds of points.
- *Computer Graphics**: Techniques for curves & surfaces representation. Graphics acceleration algorithms. Photorealism and texture mapping. Research & development of anisotropic filters for anti-aliasing. Research & development of methods for the representation & transformation of geometric entities using dual vectors and dual quaternions.
- *Motion Design of Autonomous Moving Units**: Research, development of methods for optimal motion design in environments cluttered with arbitrary obstacles utilizing evolutionary optimization methods and geometric modelling tools.
- *Operational Research*: Linear and non-linear programming. Evolutionary optimization methods (Genetic Algorithms).
- *Informatics: Programming Languages*: C/C++ (MSVC++), Pascal, Delphi, Fortran 77, Digital Fortran 90, Basic. *Special Programming Techniques*: Assembly x86, MMX & SSE instructions, CUDA. *Mathematical Libraries*: IMSL/CNL. *Graphics Libraries - APIs*: DirectX/3D, OpenGL. *Data Structures*: Binary Trees. Sorting algorithms Quick-sort, Heap-sort. *Design applications*: AutoCAD, Pro/Engineer Wildfire, Pro/Desktop.

[†] Areas of research are denoted by *

EDUCATION

- 1995-** *Ph.D. in Mechanical & Aeronautical Engineering*
1999 Mechanical & Aeronautical Engineering Department, University of Patras
Dissertation: "Development of Approximately isometric Mappings of Arbitrarily three-Dimensional Surfaces onto the Plane. Application in Computer Graphics".
Supervisor: Prof. Nikos Aspragathos
- 1990-** *Mathematics Degree*
1994 Department of Mathematics, University of Patras.

PROFESSIONAL EXPERIENCE

February 2002 – Today: *University of the Aegean*

Department: Department of Product and Systems Design Engineering

- September 1st, 2011 – today: Associate Professor (Government gazette 620/30.08.2011)
- November 16, 2005 – August 31, 2011: Assistant Professor (Government gazette 228/13.9.2005 & 501/02.07.2009)
- February 13, 2002 – November 15, 2005: Instructor

Undergraduate Courses:

- "Computer-Aided Design (K.5151)", Academic Years 2002-2012, Fall Semester.
- "Introduction to Computer-Aided Design (K.2401)", Academic Years 2002-2012, Fall Semester.
- "Computer Graphics (K.6151)", Academic Years 2002-2012, Spring Semester.
- "Methods for Product & Systems Development (K.3201)", Academic Year 2002-2009, Spring Semester.
- "Simulation (K.7452)". Academic Year 2008-2009, Fall Semester.
- "Engineering Drawing (K.4500)", Academic Year 2009-2012, Spring Semester.
- "Introduction to Computer-Aided Design (K.2400)", Academic Year 2001-2002, Spring Semester.
- "Mathematics II - Exercises", Academic Year 2001-2002, Spring Semester.

Post-Graduate Courses:

- «Introduction to Computer-Aided Design (CAD)», Academic Year 2010-2012, Fall Semester.
- « Computer-Aided Design and Analysis (CAD/CAE)», Academic Year 2010-2012, Spring Semester.
- «Computer-Aided Design (CAD)», Academic Year 2003-2010, Fall Semester.
- «Geometric Modeling (CAD)», Academic Year 2003-2010, Spring Semester.

May 2001 – December 2010: *ELKEDE – Technology & Design Centre SA*

About the Company: ELKEDE – Technology & Design Centre SA was a multi-technological research institute and educational organisation with activities in: (a) Shoe Sector, (b) Leather-Tannery, (c) Textile, (d) Wood – Furniture, (e) Plastics (polymers), (f) Clothing.

Department: Research & Technology

- July 2005 – December 2010: Senior R&D Consultant, Project Manager (External Collaborator)
- May 2001 – June 2005: Coordinator of the R&T Department

INDUSTRIAL RESEARCH & DEVELOPMENT OF COMMERCIAL SOFTWARE

▪ **2001-2010:** *Personal involvement in the implementation and/or preparation of National & European Research Projects through my collaboration with ELKEDE – Technology & Design Centre SA:*

- **2008-2011:** Knowledge Based Collaborative 3D Virtual Design dedicated to the Clothing & Leather/Footwear SMEs (ECO-TEX-DESIGN), FP7 (Greek project manager. Total budget: 4.2M Euro).
- **2010-2012:** Promotion of Environmental Legislation among European Footwear Industries (SHOELAW), LIFE08 ENV/E/000147 (Greek project manager. Total budget: 0.874M Euro).
- **2004-2008:** Custom, Environment, and Comfort made shoe (CEC-made-shoe), Integrated Project, FP6 (Greek project manager. Total budget: 19.135M Euro).
- **2003-2008:** Intelligent Computer-Aided Footwear Design (ICAFD), Eureka (Proposal author & project leader. Total budget: 2.3M Euro).
- **2003-2008:** Support Infrastructure for Fast and Semi-Customised Shoes Development (DNA-SIFAST), Eureka (Project leader. Total budget: 2.0M Euro).
- **2003-2005:** Intelligent & Multifunctional Rubber Compounds/Adhesives for the Shoe Industry (INNORUBBER), Co-operative Research, 6th Framework Programme (Greek project manager. Total budget: 1.22M Euro).
- **2002-2003:** European Footwear Network for Electronic Trading 3 (EFNET-3), 5th Framework Programme (Greek project manager. Total budget: 0.95M Euro).
- **2002-2004:** Microwave Sensors for Monitoring of Polyurethane Injection/Casting Moulding Processes in the Shoe Industry (MICROSHOE), CRAFT-1999-72356, CRAFT, 5th Framework Programme, (Greek project manager. Total budget: 0.94M Euro).
- **2002-2005:** Improved Roughing with Integrated Sensor Technology (IRIST), GRD1-2001-40403, 5th Framework Programme (GROW) (Total budget: 3.13M Euro).
- **2000-2002:** Intersectorial Technology Transfer on Rapid Prototyping in the Toy and Shoe Industries (T-SHOE), IPS-1999-00027, RTT, 5th Framework Programme.
- **1995-2001:** National Industry Programme EPB – Measure 3.1 (2nd Community Support Framework). Participation in the development of software for the strengthening of the infrastructure of Greek research institutes and SMEs.

1994 – Today: *Development of Commercial Software through my collaboration with ELKEDE – Technology & Design Centre SA:*

- *ShoeSize:* Automatic calculation of real shoe size by measured data (2006-2007).
- *SmartShoe:* Integrated ERP software for the management and monitoring of the production process of a footwear company and the associated resources. *Head of the development team (2004-2005).*
- *Shoe Modeling 3D:* 3D Computer-aided footwear design system. *System design & development (1997-2000).*
- *Shoe Modeling 2D:* 2D Computer-aided footwear design system (pattern engineering). *System design & development (1997-2003).*

- *ShapesScan Pro*: Application of Reverse Engineering for the recognition and geometric modeling of scanned patterns in digital images. *System design & development (1997-2000)*.
- *ShoePLUS*: A multimedia system for presenting shoe collections in the market. *Head of the development team (2003)*.
- *MasterSoft*: Integrated PDM software for the management and monitoring of the production process of a footwear company. *Head of the development team 2002*.
- *AutoCOD*: Automated calculation of COD and BOD pollution in civil wastes. *System design & development (1998)*.

ACADEMIC RESEARCH

- *Basic/academic research in the fields*: Computer-Aided Design, Geometric Modeling, Product Study/Analysis, Reverse Engineering, Computer Graphics, Motion Design.

University of the Aegean, Department of Product & Systems Design Engineering

- **2012-2015**: Development of cost-effective and accurate computer-aided design and engineering (CAD/CAE) tools for the determination and optimization of footwear comfort parameters (OPT-SHOES). Research Program "Aristeia" (Main researcher. Budget: 0.3M Euro).
- **2011**: Geometric modeling and photorealistic representation of a model of an ancient penteconter, R&D (Scientific Coordinator).
- **2011**: Development of a floating pool light with remote control, Voucher Number: 79104403-05-000016 "Vouchers for SMEs" (Scientific Coordinator).
- **2009-2012**: SMILIES: Small Mediterranean Insular Light Industries Enhancement and Support 1G-MED08-454 (Scientific Coordinator).
- **2008**: Electronic Services for the Support of Traditional Folk Art, R&D Project funded by ELKEA (Scientific Coordinator).
- **2007-2009**: A New Parametric CAD system for the Reconstruction of Traditional Jewellery, R&D Project funded by ELKA (Scientific Coordinator).
- **2005-2008**: 3D Graphics search and retrieval, PENED 20 03 E520 (Researcher, S.C.: Demokritos).
- **2004-2008**: A modern 2D/3D CAD system for apparel design, R&D Project funded by ELKEDE (Researcher, S.C.: Assoc. Prof. N. Sapidis).
- **2003-2008**: Visual Environment for Furniture Presentation, R&D Project funded by ELKEDE (Researcher, S.C.: Assoc. Prof. N. Sapidis).
- **2003-2005**: Integrated Environment for Collaborative Design of Product and Processes through 3D Human Models, Concerted Programme For Electronic Business, Operational Programme «Information Society» Axis 3 – Measure 3.3 (Researcher, S.C.: Dept. of Mechanical Engineering and Aeronautics, U of Patras).
- **2003-2005**: Information Management and Exchange in Network-Centric Product Design: Modeling Component Knowledge in Design Repositories, Bilateral R&T Programme Greek-France 2003-2005, (Researcher, S.C.: Assoc. Prof. N. Sapidis).

University of Patras, Department of Mechanical & Aeronautical Engineering

- **2003-2006:** *Post Doc researcher* (and author of the research proposal) in the Research Project “Optimal robot motion design based on Computational Geometry”, Basic Research Programme “K. Karatheodoris”, University of Patras, 2003
- **1997-2000:** *Main Researcher* (and author of the research proposal) in the Research Project: “Development of an Integrated Package for Computer-Aided Footwear Design and Manufacture”, ELKEDE, 1997.
- **1995-1997:** *Main Researcher* in the National Research Project: “Algorithms for Approximate Design of Planar Developments of Arbitrary Surfaces. Application in CAD”, PENED 91, 482.
- **1995-1999:** Ph.D. dissertation.
- **1995-2003:** Member of the *Robotics Research Group* (Prof. N. Aspragathos).

FURTHER ACADEMIC TEACHING EXPERIENCE

2002 – 2003: Mathematics Department, Graduate Studies Programme –University of Patras

- “Computer-Aided Industrial Design I”, Fall Semester.
- “Computer-Aided Industrial Design II”, Spring Semester.

1995– 2000: Mechanical Engineering & Aeronautics Department, University of Patras

- Tutor of laboratory courses “Electrical Circuits and Machines I” with main instructor Prof. N. Aspragathos. *Academic Years 1995-99.*
- Tutor of laboratory courses “Mechanical Design” with main instructor Assoc. Prof. Ch. Papadopoulos. *Academic Years 1995-99.*
- Tutor of exercises for the course “Robotics” with main instructor Prof. N. Aspragathos. *Academic Years 1997-99.*
- Lecture at the graduate course “Special Issues on Robotics” with main instructor Prof. N. Aspragathos. *Three hours lecture at the Spring Semester at the Academic Years 1998-99. Subject: “Representation and Transformation of Geometric Entities Using Dual Unit Vectors and Dual Unit Quaternions”.*
- EPEAEK-Action 3.4.c: Continuous Vocational Training Program, “Computer-Aided Product Design. CAD/CAM”, Scientific Supervisor: Assoc. Prof. Ch. Papadopoulos. *Twenty five hours seminars to professionals of different specialties (University Graduates). October 1997.*

NON-ACADEMIC TEACHING EXPERIENCE

1995 – 1998: IEK Computer Practica – Patras

- *Designing with AutoCAD:* Courses – seminars on designing with AutoCAD in small groups (up to six students) composed mainly of Architects, Civil Engineers, Mechanical Engineers. More than 20 seminars have been completed (duration of each seminar: 20-25 hours).
- Seminars on software applications and operating systems.
- Seminars on designing with AutoCAD to Engineers of the Frygorex Company (November 1997).

2001 – 2010: KEK ELKEDE

- Seminars under the vocational training programme “Vocational training and technology transfer in SMEs and VSEs of the leather, plastics, wood-furniture and textile-finishing sectors”, Concerned Business Programme for Competitiveness, Measure 8.2-8.2.4 (2002).
- Several seminars and lectures on the utilization of advanced CAD/CAM technologies for product design and manufacture.
- Inter-enterprise seminars on advanced CAD/CAM technologies.

SCIENTIFIC & PROFESSIONAL ACTIVITIES

Referee for the International Scientific Journals (20)

- Computer-Aided Design
- Computer-Aided Geometric Design
- Computer-Aided Design & Applications
- Engineering With Computers
- The Visual Computer
- Computer Graphics Forum
- International Journal of Product Development
- Graphical Models
- Information Sciences
- International Journal of Computer Applications in Technology
- International Journal of Computer Vision
- Computers & Electronics
- Mathematical Problems in Engineering
- Simulation Modelling Practice and Theory
- Journal Sensors
- 3D Research
- Journal of the International Measurement Confederation
- Mechatronics
- Hybrid Intelligent Systems: Concepts & Applications
- International Journal On Advances in Software

Referee for the International Scientific Publication (1)

- Shape Analysis and Structuring, Editors: Leila De Floriani, Michela Spagnuolo, Springer-Verlag

Referee for the International Scientific Conferences (21)

- 12th International CAD/Graphics 2011 conference, Jinan, China, on September 15-17, 2011.
- CAD'11, The 2011 International CAD Conference and Exhibition, Taipei, Taiwan, June 27-30.
- The 15th World Multi-Conference on Systemics, Cybernetics and Informatics: WMSCI 2011, July 19-22, 2011, Orlando, Florida, USA.
- CGI'10, Computer Graphics International 2010, Singapore, June 9-11.
- The 14th World Multi-Conference on Systemics , Cybernetics And Informatics, June 29th - July 2nd, 2010 – Orlando, Florida, USA.

- CAD'10, The 2010 International CAD Conference and Exhibition, Dubai, United Arab Emirates, June 21-25.
- SYROCO 2009: 9th International IFAC Symposium on Robot Control, Nagaragawa Convention Center, Gifu, Japan, September 9-12, 2009.
- 17th Mediterranean Conference on Control and Automation, June 24-26, 2009, Thessaloniki, Greece.
- ReMAR 2009: The ASME/IFTOMM International Conference on Reconfigurable Mechanisms and Robots, London, June 22-24, United Kingdom.
- Computer Graphics, Imaging and Visualization, 25, 26 - 28 July 2006, Sydney, Australia.
- The 6th international conference on Computer-Aided Industrial Design & Conceptual Design (CAID&CD 2005), Delft University of Technology, May 29 - June 1, 2005.
- International Conference Computer Graphics, Imaging and Vision, CGIV05, 26- 29 July 2005, Chinese Academy of Sciences, Beijing, China.
- Eurographics 2004, Grenoble (France), August 30 to September 3.
- International CAD Conference and Exhibition (CAD'04), May 24-28, 2004, Dusit Resort, Pattaya Beach, THAILAND.
- The 9th ACM Symposium on Solid Modeling and Applications 2004 (SM'04), Genova, Italy, June 9-11, 2004.
- The 7th World Multi-Conference on Systemics, Cybernetics and Informatics, SCI 2003, July 27 - 30, 2003, Orlando, Florida, USA.
- International Conference on Geometric Modeling & Graphics, GMAG03, JULY 16-18, 2003, London, UK.
- The 8th ACM Symposium on Solid Modeling & Applications 2003, June 16-20, 2003, University of Washington, Seattle, WA.
- The 11-th International Conference in Central Europe on Computer Graphics, Visualization and Computer Vision 2003, WSCG'03, February 3 - 7, 2003.
- The 7th ACM Symposium on Solid Modeling & Applications 2002, Saarbrücken, Germany.
- The 5th World Multi-Conference on Systemics, Cybernetics and Informatics, SCI 2001, July 22-25, 2001, Orlando, Florida USA.

Referee for the Research Funding Organizations (3)

- The French National Research Agency (<http://www.agence-nationale-recherche.fr>).
- Austrian Science Fund (FWF - www.fwf.ac.at/en/).
- University of Patras, "K. Karatheodoris" Research Program.

Personal Invitations for Presentation in International Conferences or Workshops (6)

- Collaborative Conference on 3D Research (CC3DR), June 25 - June 29, 2012, Seoul, South Korea
- Symposium on Geometry: From Science to Applications, TEI of Piraeus, 1-2 June 2012.
- Dagstuhl Seminar 05221: Geometric Modeling, International Conference and Research Center for Computer Science, Schloss Dagstuhl, Germany, May 29- June 03, 2005.
- CNRS Geometric Modeling Workshop (GTMG'2004), Lyon, France, 10-11 March 2004.
- 3D Scanning and Virtual Try-On Systems, EURASIA-TEX Project, Athens, Greece, November 24th -25th, 2003.

- XIV International Technical Footwear Congress, UITIC, Budapest, Hungary, 10-12 October 2002.

MEMBER OF INTERNATIONAL EDITORIAL REVIEW BOARDS (3)

- The Journal of Convergence (JoC)
- Journal Sensors
- International Journal on Advances in Software

MEMBER OF INTERNATIONAL CONFERENCE PROGRAM COMMITTEES (35)

- International Conference on Health Informatics - HEALTHINF 2013, 11-14 February, 2013, Barcelona, Spain (<http://www.healthinf.biostec.org/>).
- Applied Computing 2012, Plaza de Cibeles, 19 – 21 October, Madrid, Spain.
- The 2012 International Workshop on Web and Multimedia Services (WMS-12), Jeju, Korea, November 22-25, 2012.
- NBIS 2012 - The 15th International Conference on Network-Based Information Systems, Melbourne, Australia, September 26 - 28, 2012.
- ADM 2012 - International Workshop on Advances in Data Management, 3 - 5 August 2012, Chennai, India.
- FSKD'12 - 9th International Conference on Fuzzy Systems and Knowledge Discovery, 29-31 May 2012, in Chongqing, China.
- SERA 2012 - 10th International Conference on Software Engineering Research, Management and Applications, Kunming, Yunnan Province, China, April 16th-18th, 2012.
- 11th IEEE/ACIS International Conference on Computer and Information Science, Shanghai, China, May 30th – June 1st 2012.
- CAD'12 Jun 11-14, 2012 Marriott Gateway on the Falls, Niagara Falls, Canada (<http://www.cadconferences.com/>)
- The 2011 International Workshop on Web and Multimedia Services (WMS-11), Jeju, Korea, December 12-15, 2011 (<http://web.ftrai.org/wms2011/>)
- International Conference on Health Informatics - HEALTHINF 2012, 1-4 February, 2012, Vilamoura, Algarve, Portugal (<http://www.healthinf.biostec.org/>).
- IADIS International Applied Computing 2011 (AC 2011), Rio de Janeiro, Brazil (<http://www.computing-conf.org/>)
- 10th IEEE/ACIS International Conference on Computer and Information Science (ICIS 2011).
- 1st ACIS International Conference on Computers, Networks, Systems and Industrial Engineering (CNSI 2011).
- IMMM 2011, The First International Conference on Advances in Information Mining and Management, July 17-22, 2011, Bournemouth, UK (<http://www.iaria.org/conferences2011/IMMM11.html>).
- Eurographics Workshop on 3D Object Retrieval, April 10, 2011, Llandudno, UK (<http://www.global-edge.titech.ac.jp/3dor2011/>).
- International Workshop on 3D Object Retrieval, 25-29 October 2010, Firenze, Italy (<http://www-rech.telecom-lille1.eu/acm3dor/index.html>).
- International Conference on Health Informatics - HEALTHINF 2011, 26-29 January, 2011, Rome, Italy (<http://www.healthinf.biostec.org/>).

- IADIS International Conference Applied Computing, AC 2010, Germany (<http://www.computing-conf.org/topics.asp>).
- Eurographics 2010 Workshop on 3D object retrieval, May 2, Sweden (<http://www-rech.telecom-lille1.eu/3dor/index.html>).
- FSKD'10, 7th International Conference on Fuzzy Systems and Knowledge Discovery (<http://icnc-fskd2010.ytu.edu.cn/>).
- ICNC'10, 6th International Conference on Natural Computation (<http://icnc-fskd2010.ytu.edu.cn/>).
- IADIS International Conference Applied Computing 2009 (<http://www.computing-conf.org/>).
- Eurographics 2009 Workshop on 3D object retrieval (<http://3DOR.ge.imati.cnr.it>).
- 10th ACIS International Conference on Software Engineering, Artificial Intelligence, Networking, and Parallel/Distributed Computing, SNPD 2009.
- SERA 2009 - 7th ACIS International Conference on Software Engineering Research, Management and Applications (<http://acis.cps.cmich.edu:8080/SERA2009/index.html>).
- ICSTC 2009 - International Computer Science and Technology Conference (San Diego, June 30-July 1, 2009).
- 8th IEEE/ACIS International Conference on Computer and Information Science 2009.
- Eurographics 2008 Workshop on 3D object retrieval (<http://www.ics.forth.gr/eg2008/venue.html>).
- ICIS 2008: International Conference on Intelligent Systems, Bangkok, Thailand, December 07-09, 2008 (<http://www.waset.org/icis08/>).
- IADIS International Conference Applied Computing 2008 (<http://www.computing-conf.org/>).
- IADIS International Conference Applied Computing 2007 (<http://www.computing-conf.org/>).
- 8th ACIS International Conference on Software Engineering, Artificial Intelligence, Networking, and Parallel/Distributed Computing (SNPD2007) (<http://www.acisinternational.org/>).
- 3rd ACIS International Workshop on Self-Assembling Wireless Networks (SAWN2007) (<http://www.acisinternational.org/>).
- 20th ISCA International Conference on Computer Applications in Industry and Engineering (CAINE 2007).

COMMITEES - ADMINISTRATION

- Oct.07-today: Associate Member of the Research Council of the University of the Aegean.
- February 2011 – today: Member of the Financial Council of the University of the Aegean.
- February 2011 – today: Member of the Research Committee of the DPSD Engineering.
- March 2012 – today: Member of the Programming and Development Committee of the DPSD Engineering.

PUBLICATIONS

International Scientific Journals

- [A1] Azariadis P., Aspragathos N., Design of Plane Patterns of Doubly Curved Surfaces, Computer-Aided Design, 1997, **29**(10), 675-685.

- [A2] Azariadis P., Aspragathos N., On Using Planar Developments to Perform Texture Mapping on Arbitrarily Curved Surfaces, *Computers & Graphics*, 2000, 24, 539-554.
- [A3] Azariadis P., Aspragathos N., Computer Graphics Representation And Transformation Of Geometric Entities Using Dual Unit Vectors And Line Transformations, *Computers & Graphics*, 2001, 25, 195-209.
- [A4] Azariadis P., Aspragathos N., Geodesic Curvature Preservation in Surface Flattening Through Constrained Global Optimization, *Computer-Aided Design*, 2001, **33**(8), 581-591.
- [A5] Azariadis P., Nearchou A., Aspragathos N., An evolutionary algorithm for generating planar developments of arbitrarily curved surfaces, *Computers in Industry*, 2002, **47**(3), 357-368.
- [A6] Azariadis P., Parameterization of clouds of unorganized points using dynamic base surfaces, *Computer-Aided Design*, 2004, **36**(7), 607-623.
- [A7] Azariadis P., Sapidis N., Planar Development of Free-Form Surfaces: Quality Evaluation and Visual Inspection, *Computing*, 2004, **72**(1-2), 13-27.
- [A8] Azariadis P., Sapidis N., Drawing Curves onto a Cloud of Points for Point-Based Modelling, *Computer-Aided Design*, 2005, **37**(1), 109-122 (Ranked #19 within journal Top25 Hottest Articles Oct-Dec'04).
- [A9] Azariadis P., Aspragathos N., Obstacle Representation by Bump-Surfaces for Optimal Path-Planning, *Robotics and Autonomous Systems*, 2005, **51**(2-3), 129-150 (Ranked #6 within journal Top25 Hottest Articles April-June'05).
- [A10] Sapidis N., Kyratzi S., Azariadis P., Improved computational tools for concept development based on sketches and advanced CAD technologies, *Computer-Aided Design and Applications*, 2005, **2**(6), 707-716.
- [A11] Xidias E., Azariadis P., Aspragathos N., Energy-Minimizing Motion Design for Nonholonomic Robots Amidst Moving Obstacles, *Computer-Aided Design and Applications*, **3**(1-4), 2006, 165-174.
- [A12] Azariadis P., Sapidis N., Efficient parameterization of 3D point-sets using recursive dynamic base surfaces, LNCS Vol. 3746 (10th Panhellenic Conference on Informatics - PCI 2005), 2005, 296-306.
- [A13] Xidias E., Azariadis P., Aspragathos N., Two Dimensional Motion Planning for Nonholonomic Robots Using the Bump-Surfaces Concept, *Computing (Springer)*, 2007, **79**(2-4), 109-118.
- [A14] Agathos A., Pratikakis I., Perantonis S., Sapidis N., Azariadis P., 3D Mesh Segmentation Methodologies for CAD applications, *Computer-Aided Design and Applications*, 2007, **4**(6), 827-842.
- [A15] Azariadis P., Moulitanitis V., Alemany S., Olaso J., de Jong P., van der Zande M., Brands D., Virtual Shoe Test Bed: A Computer-Aided Engineering Tool For Supporting Shoe Design, *Computer-Aided Design and Applications*, 2007, **4**(6), 741-750.
- [A16] Azariadis P., Sapidis N., Product Design Using Point-Cloud Surfaces: A Recursive Subdivision Technique for Point Parameterization, *Computers in Industry*, 2007, Vol.58, 832-843.
- [A17] Mpampa M., Azariadis P., Sapidis N., A new methodology for the development of sizing systems for the mass customization of garments, *International Journal of Clothing Science and Technology(IJCST)*, 2010, **22**(1), 49-68.
- [A18] Xidias E., Azariadis P., Aspragathos N., Path Planning of Holonomic and Non-Holonomic Robots Using Bump-Surfaces, *Computer-Aided Design and Applications*, 2008, **5**(1-4), 497-507.
- [A19] Azariadis P., Olaso J., Moulitanitis V., Alemany S., González J-C, de Jong P., Dunias P., van der Zande M., Brands D., An Innovative Virtual-Engineering System for Supporting Integrated

- Footwear Design, *International Journal of Intelligent Engineering Informatics (IJIEI)*, 2010, 1(1), 53-74.
- [A20] Agathos A., Pratikakis I., Papadakis P., Perantonis S., Azariadis P., Sapidis N., 3D Articulated Object Retrieval using a graph-based representation, *The Visual Computer*, 2010, 26: 1301-1319 doi:10.1007/s00371-010-0523-1.
- [A21] Xidias E., Azariadis P., Mission Design for a Group of Autonomous Guided Vehicles, *Robotics and Autonomous Systems*, doi:10.1016/j.robot.2010.10.003, 59 (2011) 34-43.
- [A22] Kyratzi S., Azariadis P., Sapidis S., Realizability of a Sketch: An Algorithmic Implementation of the Cross-Section Criterion, *Computer-Aided Design and Applications*, 2011, 8(5), 665-679.
- [A23] Stamati V., Antonopoulos G., Azariadis Ph., Fudos I., A Parametric Feature-based Approach to Reconstructing Traditional Filigree Jewelry, *Computer-Aided Design*, 2011, 43: 1814-1828.

Chapters in Books

- [B1] Azariadis P. and Sapidis N., Planar Development of Digital Free-Form Surfaces, in *Advances in Geometric Modeling*, John Wiley, Editor: M. Sarfraz, ISBN: 0-470-85937-7, 2003.
- [B2] Xidias E., Aspragathos N., Azariadis P., Mission planning of mobile robots and manipulators for service applications, *Service Robots and Robotics: Design and Application*, IGI Global, to appear.
- [B3] Azariadis P., Computer-Aided Engineering in Footwear Design: a review, in *The Science of Footwear*, Editor Prof. Ravi Goonetilleke, Taylor & Francis Group, to appear.

Conference Proceedings with Referees

- [C1] Azariadis P., Aspragathos N., Tools for Designing and Engineering the Plane Patterns of Doubly Curved Surfaces, Proc. of CADEX 1996, Linz, Austria, IEEE CS Press, Sept. 9-11, 48-56.
- [C2] Azariadis P., Aspragathos N., Surface Flattening Based on Constraint Global Optimization, WSCG 2000, Plzen - Bory, Czech Republic, Journal of WSCG, Vol. I, 68-75.
- [C3] Azariadis P., Sapidis N., Development of Curves onto a point-cloud for digital product design, Proc. of the 1st Greek Conference of Mechanical & Electrical Engineers, Athens, March 28-30, 2005, pp.81.
- [C4] Azariadis P., Sapidis N., Product Design Using Point-Cloud Surfaces, Proc. of the 6th international conference on Computer-Aided Industrial Design & Conceptual Design (CAID&CD 2005), Delft University of Technology, May 29 - June 1, 2005, pp. 231-236.
- [C5] Azariadis P., Sapidis N., Planar developments of free-form surfaces: methods evaluation and visualization of the results, Proc. of the 2nd Greek Conference of Mechanical & Electrical Engineers, Athens, May 17-19, 2007.
- [C6] Xanthopoulos N., Azariadis P., Development of a method for specifying inner dimensions in footwear, 2nd National Conference on Metrology (www.metrologia2007.gr), Thessalonica, Oct'07.
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CITATIONS

- **Two hundred and fifty two (252)** citations found up to April 2012: 57 in [A1], 13 in [A2], 5 in [A3], 38 in [A4], 14 in [A5], 20 in [A6], 9 in [A7], 22 in [A8], 10 in [A9], 2 in [A10], 4 in [A13], 45 in [A14], 1 in [A15], 1 in [A16], 2 in [A17], 1 in [A18], 1 in [A20], 3 in [A21], 1 in [B1] and 3 in [C8].
- **Two (2)** citations in [A8] in Abstract.