

# Avraam P. Chatzopoulos

## Lecturer

---

---

Department of Industrial Design  
and Production Engineering,  
University of West Attica

Thivon 250, 12244, Egaleo  
☎ +30 210 5381288 (office)  
Email: [xatzopoulos@uniwa.gr](mailto:xatzopoulos@uniwa.gr)

---

---

## EDUCATION

### **PhD(c) in Engineering**

*(July 2018 - today)*

Department of Industrial Design and Production Engineering | University of West Attica, Greece

Dissertation: *Development of a low-cost robotics platform, based on the use of action research findings for STEM education and educational robotics*

### **MSc in Information and Communication Technologies for Education**

*(July 2011)*

Department of Early Childhood Education | National and Kapodistrian University of Athens, Greece

Diploma Thesis: *The role of new web technologies (web 2.0) in education*

### **MSc in Telematics Management**

*(June 2003)*

Department of Telecommunications, Informatics and Media | Danube University of Krems, Austria

Diploma Thesis: *Developing an e-shop*

### **BSc in Automation Engineering**

*(July 2000)*

Department of Automation | Technological Educational Institute of Piraeus, Greece

Diploma Thesis: *Wireless two-way data transmission*

## CERTIFICATIONS AND TRAINING

### **Statistical Conclusion with Statistical Packages**

*(February 2020)*

National Centre for Public Administration and Local Government (ΕΚΔΔΑ)

### **Video Ads (AdWords Online Certification Academy)**

*(December 2016)*

Google

### **Ads (AdWords Online Certification Academy).**

*(December 2016)*

Google

### **Mobile Ads (AdWords Online Certification Academy).**

*(November 2016)*

Google

### **Search Ads (AdWords Online Certification Academy).**

*(November 2016)*

Google

### **Basic principles of AdWords (AdWords Online Certification Academy).**

*(November 2016)*

Google

### **Google Analytics - Google Analytics Individual Qualification (GAIQ) Certification Training**

*(March 2011)*

Google

### **Instructor Training Programs for Employees of Local Government**

*(July 2009)*

KEK Delta

**Instructor Training Programs for Employees of the Distance Lifelong Learning Programs “Information Technologies – Communications” and “Economy - Administration – Business”**

*(September 2007)*

General Secretariat for Adult Education (ΓΓΕΕ) of the Ministry of National Education and Religions (ΥΠΕΠΘ)

**EKEPIS Trainers Training**

*(March 2007)*

National Center for Certification of Continuing Education Structures (ΕΚΕΠΙΣ) of the Ministry of National Education and Religions (ΥΠΕΠΘ)

**Image Editing and Special Techniques in Photoshop**

*(April 2006)*

The Photographer magazine

**Trainers Training of Adult Education Centers (K.E.E)**

*(February 2005)*

General Secretariat for Adult Education (ΓΓΕΕ) of the Ministry of National Education and Religions (ΥΠΕΠΘ)

**ECDL Core Certificate**

*(February 2005)*

European Computer Driving License (ECDL)

**General Course on Intellectual Property**

*(April 2004)*

World Intellectual Property Organization (WIPO)

## ACADEMIC AND TEACHING EXPERIENCE

### A. ACADEMIC

---

**Lecture**, Department of Industrial Design and Production Engineering | University of West Attica

*(March 2018 – today)*

#### **Undergraduate Courses:**

- Mechatronics
- Robotics
- Self-Driving Vehicles Design
- Electrical, Hydraulic and Pneumatic Control Systems
- Industrial Automations - PLC
- Design and Planning of Supply Systems.
- Design of industrial Actuation Systems

#### **Postgraduate Courses:**

MSc program "Automation in Production and Services", Department of Industrial Design and Production Engineering | University of West Attica

- Automations in Industrial Production - Mechatronics

MSc program «New Technologies for Shipping and Transport», Department of Industrial Design and Production Engineering | University of West Attica, in partnership with Department of Shipping, Trade and Transportation | University of the Aegean

- Embedded Systems
- UAV Principles and Applications

**Professor of Applications**, Department of Automation | Piraeus University of Applied Sciences

*(November 2017 – February 2018)*

#### **Undergraduate Courses:**

- Mechatronics
- Self-Driving Vehicles Design
- Hydraulic and Pneumatic Control Systems

**Postgraduate Courses:**

MSc program "Automation in Production and Services", Department of Automation | Piraeus University of Applied Sciences

- Automations in Industrial Production - Mechatronics

MSc program «New Technologies for Shipping and Transport», Department of Automation | Piraeus University of Applied Sciences, in partnership with Department of Shipping, Trade, and Transportation | University of the Aegean

- Embedded Systems
- UAV Principles and Applications

**Lab Assistant**, Department of Automation | Piraeus University of Applied Sciences, and Department of Textiles | Piraeus University of Applied Sciences

*(October 2000 – November 2017)*

**Undergraduate Courses** | Department of Automation:

- Design and Development of an Automation Control System
- Mechatronics
- Mechatronics Applications
- Multimedia Technologies
- Telematics II
- Motion Control
- Hydraulic and Pneumatic Control Systems
- Robotics
- CNC Technology

**Undergraduate Courses** | Department of Textiles:

- Design Multifunctional – High-Quality Clothing

**Postgraduate Courses:**

MSc program "Automation in Production and Services", Department of Automation | Piraeus University of Applied Sciences

- Automations in Industrial Production - Mechatronics

MSc program «New Technologies for Shipping and Transport”, Department of Automation | Piraeus University of Applied Sciences, in partnership with Department of Shipping, Trade and Transportation | University of the Aegean

- GIS in Shipping and Transport

MSc program “Advanced Industrial Production Systems”, Department of Mechanical Engineering | Piraeus University of Applied Sciences in partnership with Kingston University UK

- Mechatronics Design & Automation

**Lab Assistant**, Department of Automation | Technological Educational Institute of Chalkida  
(October 2006 – July 2007)

#### **Undergraduate Courses:**

- Introduction to Electronics

## **B. TEACHING**

---

**Instructor** in Vocational Training Centers (K.E.K.), Vocational Training Institutes (I.E.K.), and various private-sector Educational Institutes: More than 15,000 teaching hours.  
(October 2000 – June 2017)

Teaching courses:

- ICT basic skills
- Web Design: CorelDraw, Photoshop, Flash
- Web Development: HTML, CSS, Javascript, XML, FrontPage, Dreamweaver, SQL Server
- Internet Marketing, SEO, PPC, Google Adwords, Google Analytics
- Social Media Marketing, Facebook, Twitter
- Blogs’ Development, Wiki, Podcasts, YouTube, Ustream
- Content Management Systems (CMS): Joomla, WordPress
- Learning Management Systems (LMS): Moodle, E-class
- Internet Services (Google Mail, Google Calendar, Google Groups, Google Sites, Google Apps, Google Docs, Google Forms, Picasa, Wikis)
- Wireless and Local Networks

In the context of the above seminars, I prepared the trainees for participation in computer certification exams and specialized software with a success/participation rate of over 80%. Indicative certifications: ECDL, Microsoft Office Specialist, Cambridge IT Skills, IC3, ICT, KeyCert.

**Teacher**, 1st Technological Educational High School of Chaidari.  
(November 2000 – July 2001)

Teaching courses:

- Computer Networks
- Internet Technologies
- Visual Basic Programming
- Data Acquisition, Transfer, and Control
- Computer for Electronics

**Full-time Teacher** to English-speaking students, Hellenic Aviation Industry (EAB).  
(February 2000 – July 2000)

Teaching courses:

- Digital Electronics
- Analogue Electronics
- Microcomputers

## C. OTHER

---

1. In the context of Erasmus+ "Staff Mobility for Teaching" program (20 October 2020 – 27 October 2020), I delivered lectures in the Department of Materials Science and Metallurgy of the School of Industrial Aerospace and Audiovisual Engineering (University Universitat Politècnica de Catalunya, Barcelona, Spain), entitled "Design and construction of an integrated system in a multifunctional garment".
2. In the context of Erasmus+/ICM participants, I delivered lectures to foreign students from various countries as well as presentations to the staff of foreign institutions.
3. In addition, my teaching experience includes supervising tasks related to the design and construction of mechatronic systems, robotic systems, automatic control systems, digital circuits, and web applications. Indicative examples:
  - Supervision of diploma theses of the Department of Industrial Design and Production Engineering | University of West Attica (more than 20 completed).

- Co-supervision of diploma theses of students of the postgraduate programs "New Technologies in Shipping and Transportation" and "Automation in Production and Services", Department of Industrial Design and Production Engineering | University of West Attica.
- Student internships (12 completed).

## RESEARCH INTERESTS

- Integrated control systems in Robotics and Mechatronics
- Educational Robotics and STEM Education
- Educational Technologies
- Internet technologies and Digital Marketing

## EDUCATIONAL PROGRAMS

1. ESPA 2007-2013 SUB-PROJECT 01 Development of digital courses, Support of an institutional platform and other actions of the practice entitled "Open academic courses TEI of Piraeus" MIS 380196 of the Business Program "Education and Lifelong Learning".  
*(December 2014 – August 2015)*
2. ESPA 2007-2013 SUB-PROJECT 01 Development of digital courses, Support of an institutional platform and other actions of the practice entitled "Open academic courses TEI of Piraeus" MIS 380196 of the Business Program "Education and Lifelong Learning".  
*(January 2014 – December 2014)*
3. Business Program "Education and Lifelong Learning» MIS 467412 – University Alumni Knowledge Update Program"  
*(March 2014 – July 2014)*
4. EPEAEK: "Reform of Undergraduate Curricula of TEFAA"  
*(March 2008 – June 2008)*
5. EPEAEK: "Reform of Undergraduate Curricula of TEFAA"  
*(September 2007 – February 2008)*

6. EPEAEK: "Reform of Undergraduate Curricula of TEFAA"  
*(January 2007 – August 2007)*
7. EPEAEK PSE "industrial Informatics"  
*(September 2004 – December 2005)*
8. EPEAEK-II: "Reform of the Undergraduate Program of the Department of Automation of TEI Piraeus"  
*(September 2003 – December 2006)*

## RESEARCH PROGRAMS

1. ENIRISST\_ MIS 5027930, Subproject 8 entitled "University of West Attica - ELKE" of the operation "Intelligent Infrastructure for Shipping, Supply Chain, Transport and Logistics". Deputy Scientific Manager of the project.  
*(July 2020 – December 2020)*
2. ENIRISST\_ MIS 5027930, Subproject 8 entitled "University of West Attica - ELKE" of the operation "Intelligent Infrastructure for Shipping, Supply Chain, Transport and Logistics". Deputy Scientific Manager of the project.  
*(December 2019)*
3. ARCHIMEDES III Sustainable Development Information System PSAA of the Operational Program "Education and Lifelong Learning".  
*(April 2015 – June 2015)*
4. ARCHIMEDES III Sustainable Development Information System PSAA of the Operational Program "Education and Lifelong Learning"  
*(February 2013– September 2013)*
5. Business program "Competitiveness and Entrepreneurship" of the General Secretariat for Research and Technology – Innovation Vouchers for Small and Medium Enterprises"  
*(May 2009 – August 2009)*
6. TEMPUS Project No CD\_JEP-32164-2004 "Development of the Mechatronics Curriculum at the University of Aleppo"  
*(October 2006 – August 2008)*

7. ENDOCLINIC - Patient Database Management System of the Endocrinology Clinic of Metaxa Hospital  
*(January 2006– September 2006)*
8. TEMPUS Project No CD\_JEP-32164-2004 "Development of the Mechatronics Curriculum at the University of Aleppo"  
*(October 2006 – August 2008)*
9. European Program "Socrates Ineit Mucon/Roincare University".  
*(August 2000 – October 2000)*
10. EPEAEK "ISDN Networks"  
*(February 2000)*
11. EPEAEK "Internship for AEI-TEI Students"  
*(December 1999)*
12. EPEAEK "Internship for AEI-TEI Students"  
*(August 1999)*
13. EPEAEK "ISDN Networks"  
*(June 1999)*
14. EPEAEK "Internship for AEI-TEI Students"  
*(February 1999)*
15. EPEAEK "ISDN Networks"  
*(November 1998 – December 1998)*
16. EPEAEK "Internship for AEI-TEI Students"  
*(March 1998 – November 1998)*

## ACTS AND ACTIVITIES

1. In 2017 I founded the Robotics Academy (<https://robot-academy.gr>) of the University of West Attica with the aim of research and dissemination of STEM Education and Educational Robotics. The Academy trains students and teachers of Primary and Secondary education in the subjects of educational robotics, 3D printing, development platforms (Arduino, Raspberry Pi), etc. The training is based on trading platforms e.g. Lego or robots developed at the Academy and based on open technologies. Within the Academy, I organized and offered free presentations, workshops, events, training seminars (to students and teachers), and many school educational visits. Moreover, I have implemented dozens of robotic applications for educational use, participated in school programs & competitions in robotics and electronics, and I actively help students in the completion of their projects.
2. From October 2018 -in collaboration with the Organization of Open Technologies EELLAK- I actively participate (founding member) in the organization of the annual Panhellenic Competitions of Educational Robotics (new name: Panhellenic Competition of Open Technologies in Education). As part of the competition, I delivered presentations and workshops to teachers of all levels to transfer the knowledge and the know-how for robots' design and development.
3. In collaboration with the Hellenic Branch of the World UAV Federation, I organized a Conference on Drones, UAVs, and Flying Objects at the University of West Attica to get acquainted, engage and disseminate UAV technology.
4. In collaboration with the students of the Industrial Design and Production Engineering Department (University of West Attica), I organized, provided advice and any kind of support to the establishment of the student association "Association of Drones, UAVs and Flying Objects". The General Assembly of the department appointed me the responsible teacher for counseling and coordination support of the association.
5. I participate in presentations, events, exhibitions, technology events such as Openfest, Appcamp - Android, Patent Exhibition, etc.

6. I actively support groups of students participating in technology-innovation competitions, providing them with advisory support, know-how, and equipment such as CanSat (1st place in 2019), Nasa Apps, Robotex, BlueGrowth, Plus Athena (Athens Digital Lab), etc. Moreover, I support the individual research and scientific concerns of students, assigning them targeted projects, and providing them with specialized knowledge and materials.
7. I am the Academic Advisor of the Industrial Design and Production Engineering Department (University of West Attica), for the academic year 2021-2022 providing support and guidance in matters of education and career.

## WORKING EXPERIENCE

### **Freelancer**

Subject of work: Design, Development, Installation, and Maintenance of IT and Automation Projects

*(July 2004 – October 2017)*

Indicative projects:

1. Development and maintenance of an e-learning educational platform
2. Electronic courses' creation and maintenance
3. Digital material and videotaped lessons development
4. Video recordings and editing of laboratory courses
5. Technical support (repair, installation, maintenance of PCs & PC networks, and security systems)
6. Design and installation of infrastructures, cabinets, power supply and networks data
7. Development and installation of various embedded systems projects
8. Software development
9. Websites and online store development and maintenance (e.g. livingbio.gr, petshop.gr, laundry.com.gr robot-academy.gr, laundry.gr, intelligent-machines.io, delitaste.gr, efxi.gr, quantum.gr, etc.)

## MEMBERSHIPS

1. Member of the institutionalized Research Laboratory "Industrial Systems & Applications of Mechatronics" - Department of Industrial Design & Production Engineers, University of West Attica
2. Member of the Hellenic Educational Association STEM (E3STEM)
3. Member of the Scientific Promotion Committee of STEAM of the Organization of Open Technologies (EELLAK)
4. Founding Member of the Hellenic Branch of the UAV World Federation (WORLD UAV FEDERATION)
5. Member of the Hellenic Association of New Space Economy "GREEK NEW SPACE SOCIETY"
6. Member of the Research Laboratory "ISL Intelligence System Laboratory"
7. Member of EETEM (Scientific Association of Technological Engineers)
8. Member of EPY (Association of Informatics and Computer Scientists)
9. Member of other teacher's registers: i) EKEPIS (National Certification Center for Continuing Vocational Training, ii) LAEK – OAED, iii) Social Multicenter of ADEDY, iv) National Center for Public Administration and Local Government), v) Central Union of Municipalities and Communities of Greece and Institute of Local Government

## PROJECTS AND ARTIFACTS

1. In 2020 I developed a prototype educational robot for application in online robotics labs. The robot can be remotely controlled -through the Internet-, while through its integrated cameras transmits in real-time videos from the lab space.
2. Since 2018, I have started the development of open-source robotics and hardware educational robotics platform, the design of which is based on action research, as an economical alternative proposal for commercial educational robot platforms, to utilize in Primary and Preschool education. The result of this effort is the DuBot and SmartBot robots (see publications), while the development process is constantly evolving.

3. Since 1999 I participate in the development team of the first Greek educational robotics platform called Mechatron which was used in practice in the teaching of academic courses in Mechatronics and Robotics. In 2005 it received a Patent from the Industrial Property Organization.
4. In 2011 I built a robotic vehicle with remote control capability - via PC, tablet, or mobile phone, which transmitted the image and sound recorded by the robot in real-time to be used in cases of search & rescue, surveillance, access control, etc.
5. In 2010 I built a mobile robot, the operation of which is controlled by the movements of the operator's hands without contact for educational purposes.
6. In 2006 I developed an automated system for bioclimatic control in terrariums and aquariums.

## **EXPERIENCE AND KNOWLEDGE**

Complete ability, thorough knowledge, and experience in the following:

1. Use of PCs and their operating systems (Windows, Linux, macOS, Android).
2. Use of specialized software: Numerical computing (Matlab, Octave), Statistical analysis (SPSS, Minitab, Jamovi), Computational data analysis (NVivo), PLC Programming (PLC Siemens LOGO!), etc.
3. Applications development in Logic Diagram and PC Programming Languages (Visual Basic, Basic, Python, Fortran, Delphi, Pascal, LOGO, C, C ++, COBOL, Javascript, PHP, etc.).
4. Use of word processing office software (Word), spreadsheets (Excel), databases (Access, MySQL), technical and electronic design (Kicad, EasyEDA, Tinkercad, AutoCad, Eagle, Protel, Orcad, Smart, etc.), image editing (Photoshop, Gimp, Illustrator, Fireworks, Corel, etc.), as

well as other programs for video editing (Premiere, Camtasia, After Effects), animation (Flash), digital game making (Scratch, Game Maker ), music, etc.

5. Use of video conferencing software (Skype, Teams, Webex, BigButtonBlue).
6. Design and development of static and dynamic websites using development software (Notepad ++, Dreamweaver, FrontPage, Flash, HTML, XHTML, XML, CSS, PHP, MySQL,, Javascript, Actionscript, JQuery, etc.).
7. Design and development of dynamic websites with CMS (Content Management System) using "open source" software (Joomla, WordPress, Drupal, TYPO3, etc.).
8. Design and development of Learning Management System (LMS) using "open source" software (E-class, Moodle, etc.).
9. Diagnosis and repair of failures of electronic devices and computers.

## **LANGUAGES**

Greek (native speaker)

English (good)

## PUBLICATIONS

### A. PEER-REVIEWED JOURNAL PAPERS

---

1. Tsoukstou, V., Papoutsidakis, M., & Chatzopoulos, A. (2019) "Research and Evaluation on the Control Methods and Fault Detection of Flow Valves". *Journal of Multidisciplinary Engineering Science and Technology (JMEST)*, 2019 Vol. 6, Issue 12, ISSN No. 2458-9403, Pages 11207–11213
2. Gkrekos, I., Chatzopoulos, A., Papoutsidakis, M., & Lee, W. K. (2019) "Uses and applications of Ubuntu: A technical guide". *International Journal of Engineering Applied Sciences and Technology*, 2019 Vol. 4, Issue 5, ISSN No. 2455-2143, Pages 444-454
3. Karpuzi, M., Georgiou, K., Papoutsidakis, M., & Chatzopoulos, A. (2019) "Design of an object identification system with a thermal camera". *International Journal of Engineering Applied Sciences and Technology*, Vol. 4, Issue 5, ISSN No. 2455-2143, Pages 471–477
4. Papoutsidakis, M., Chatzopoulos, A., & Piromalis, D. (2019) "UAV flight control based on Arduino board implementations". *International Journal of Engineering Applied Sciences and Technology*, Vol. 4, Issue 5, ISSN No. 2455-2143, Pages 438–443
5. Papoutsidakis, M., Negri, V. J. De, & Chatzopoulos, A. (2019) "Sensors and position control methods for pneumatic systems". *International Journal of Engineering Applied Sciences and Technology*, Vol. 4, Issue 5, ISSN No. 2455-2143, Pages 478–485
6. Papoutsidakis, M., Piromalis, D., Chatzopoulos, A., & Srivastava, A. (2019) "New trends in satellite positioning and surveillance of land vehicles". *International Journal of Engineering Applied Sciences and Technology*, Vol. 4, Issue 5, ISSN No. 2455-2143, Pages 410–416
7. Sigalos, A., Papoutsidakis, M., Chatzopoulos, A., & Piromalis, D. (2019). "Design of a flight controller and peripherals for a quadcopter". *International Journal of Engineering Applied Sciences and Technology*, Vol. 4, Issue 5, ISSN No. 2455-2143, Pages 463–470
8. Papoutsidakis, M., Chatzopoulos, A., & Piromalis, D. (2019). "Distance Control of Water Temperature via Android Devices". *Journal of Multidisciplinary Engineering Science and Technology (JMEST)*, 2019 Vol. 6, Issue 12, ISSN No. 2458-9403, Pages 11240–11244
9. Papoutsidakis, M., Priniotakis, G., & Chatzopoulos, A. (2019). "Applications of Intellectual Systems to Packaging Systems in Industrial Environment". *Journal of Multidisciplinary Engineering Science and Technology (JMEST)*, 2019 Vol. 6, Issue 12, ISSN No. 2458-9403, Pages 11214–11218
10. Sardis, A., Papoutsidakis, M., & Chatzopoulos, A. (2019). "Monitoring and Control of Data Processing in Modern Ships". *Journal of Multidisciplinary Engineering Science and Technology (JMEST)*, 2019 Vol. 6, Issue 12, ISSN No. 2458-9403, Pages 11203–11206

11. M.Papoutsidakis, A.Chatzopoulos, D.Papachristos, C. Drosos (2019) "Hydraulics and Pneumatics: Operational Characteristics and Control for Modern Industry Applications". International Journal of Computer Applications (0975 – 8887) Volume 178 – No. 25, June 2019
12. A.Kroustalis, M.Papoutsidakis, A.Chatzopoulos, D.Piromalis (2019) "Implementation of a Wireless Temperature Monitoring and Control System for Naval Applications". International Journal of Computer Applications (0975 – 8887) Volume 178 – No. 25, June 2019
13. A.Chatzopoulos, M.Papoutsidakis, G.Sofianos, D.Piromalis (2019) "An Automated Plant Pot Controlled via the Internet based on Arduino Applications". International Journal of Computer Applications (0975 – 8887) Volume 178 – No. 25, June 2019
14. A.Chatzopoulos, M.Papoutsidakis, M.Kalogiannakis, S.Psycharis (2019) "Action Research Implementation in Developing an Open Source and Low Cost Robotic Platform for STEM Education". International Journal of Computer Applications (0975 – 8887) Volume 178 – No. 25, June 2019
15. M.Papoutsidakis, A.Chatzopoulos, D.Tseles (2018) "Hydraulics and Pneumatics: A Brief Summary of their Operational Characteristics". International Journal of Multidisciplinary Engineering Science and Technology (JMEST) Volume 5 Issue 10, Oct 2018
16. A.Louros, M.Papoutsidakis, A.Chatzopoulos, C.Drosos (2018) "Design of an Innovative Flight Controller for Quadcopter Robust Handling". International Journal of Multidisciplinary Engineering Science and Technology (JMEST) Volume 5 Issue 10, Oct 2018
17. S.Melkonian, A.Chatzopoulos, M.Papoutsidakis, D.Piromalis (2018) "Remote Control via Android for a Small Vehicle's 2-Wheels Balancing". International Journal of Multidisciplinary Engineering Science and Technology (JMEST) Volume 5 Issue 10, Oct 2018
18. G.Vordos, A.Chatzopoulos, M.Papoutsidakis, D.Piromalis (2018) "Balance Control of a Small Scale Sphere with an Innovative Android Application". International Journal of Multidisciplinary Engineering Science and Technology (JMEST) Volume 5 Issue 10, Oct 2018
19. M.Papoutsidakis, A.Chatzopoulos, C.Drosos, D.Tseles (2018) "Advanced Remote Control and Thermal Zones Design of a Modern Smart Home". International Journal of Multidisciplinary Engineering Science and Technology (JMEST) Volume 5 Issue 10, Oct 2018
20. M.Papoutsidakis, A.Chatzopoulos, C.Drosos, D.Piromalis (2018) "A System for Distance Control and GPS Mapping for Automotive Applications". International Journal of Multidisciplinary Engineering Science and Technology (JMEST) Volume 5 Issue 10, Oct 2018
21. V.Mavrovounioti, A.Chatzopoulos, M.Papoutsidakis, D.Piromalis (2018) "Implementation of an 2-wheel Educational Platform for STEM Applications". International Journal of Multidisciplinary Engineering Science and Technology (JMEST) Volume 5 Issue 10, Oct 2018

22. M.Papoutsidakis, E.Symeonaki, A.Chatzopoulos, D.Piromalis (2018) "Iot Design To Support Wireless Sensor Networks And Data Transmission". International Journal of Engineering Science Invention (IJESI) Volume 7 Issue 10 Ver IV, Oct 2018
23. M.Papoutsidakis, A.Chatzopoulos, D.Piromalis, E.Symeonaki (2018) "A Summary of Future Trends in Automation Industrial Processes". International Journal of Engineering Science Invention (IJESI) Volume 7 Issue 10 Ver V, Oct 2018
24. M.Papoutsidakis, D.Piromalis, E.Symeonaki, A.Chatzopoulos (2018) "The Use of Automation Applications for Efficient Braking of Modern Wind Turbines". International Journal of Engineering Science Invention (IJESI) Volume 7 Issue 10 Ver V, Oct 2018
25. M. Papoutsidakis, A. Chatzopoulos, E. Symeonaki, D. Tseles (2018) "Methodology of PID Control – A Case Study for Servomotors". International Journal of Computer Applications (0975 – 8887) Volume 179 – No.30, March 2018
26. M. Papoutsidakis, A. Chatzopoulos, C. Drosos (2018). "Linear Position Sensors – A Brief Guide of Use of the Most Common Types". International Journal of Computer Applications (0975 – 8887) Volume 179 – No.30, March 2018
27. M. Papoutsidakis, A. Chatzopoulos, C. Drosos, K. Kalovrextis (2018). "An Arduino Family Controller and its Interactions via an Intelligent Interface". International Journal of Computer Applications (0975 – 8887) Volume 179 – No.30, March 2018
28. M. Papoutsidakis, A. Chatzopoulos, E. Symeonaki (2018). "Automation Upgrade via PLC Applications for Big Harbor Delivery Facilities". International Journal of Computer Applications (0975 – 8887) Volume 179 – No.30, March 2018
29. M. Papoutsidakis, A. Xatzopoulos, G. P. Smyraiou, D. Tseles (2017). "PLC Programming Case Study for Hydraulic Positioning Systems Implementations". International Journal of Computer Applications (0975 – 8887) Volume 167 – No.12, June 2017
30. G. P. Smyrnaiou, M. Papoutsidakis, A. Xatzopoulos, D. Tseles (2017). "Control of SIMO Systems in Simulation: The Challenge of the Multiple Axes Actuating Pneumatic Arm". International Journal of Computer Applications (0975 – 8887) Volume 168 – No.10, June 2017
31. M. Papoutsidakis, A. Chatzopoulos, D. Piromalis, D. Tseles (2017) "A 4-DOF Robotic Arm - Kinematics and Implementation as Case Study in Laboratory Environment". International Journal of Computer Applications (0975 – 8887) Volume 176 – No.8, October 2017
32. M. Papoutsidakis, A. Chatzopoulos, K. Kalovrektis, C. Drosos (2017) "A Brief Guide for the Continuously Evolving  $\mu$ Controller Raspberry PI Mod.B". International Journal of Computer Applications (0975 – 8887) Volume 176 – No.8, October 2017
33. M. Papoutsidakis, Rajneesh Tanwar, A. Chatzopoulos, D. Tseles (2017). "Custom Made Embedded Automation Systems For Smart Homes - PART 2: The Implementation".

International Journal of Engineering Applied Sciences and Technology, 2017 Vol. 2, Issue 5, ISSN No. 2455-2143, Pages 16-19

34. G. Kozoris, M. Papoutsidakis, A. Chatzopoulos (2017). "Electropneumatic Positioning System Control With The Legendary Logo! PLC". International Journal of Engineering Applied Sciences and Technology, 2017 Vol. 2, Issue 8, ISSN No. 2455-2143, Pages 15-20

## **B. BOOK CHAPTERS**

---

1. Chatzopoulos, A., Kalogiannakis, M., Papadakis, S., Papoutsidakis, M., Elza, D., & Psycharis, S. (2021). "DuBot: An Open-Source, Low-Cost Robot for STEM and Educational Robotics." In Papadakis, S., & Kalogiannakis, M. (Ed.), Handbook of Research on Using Educational Robotics to Facilitate Student Learning (pp. 441-465). IGI Global. <http://doi:10.4018/978-1-7998-6717-3.ch018>
2. Chatzopoulos, A., Papoutsidakis, M., Kalogiannakis, M., Psycharis, S., & Papachristos, D. (2020). "Measuring the impact on student's Computational Thinking skills through STEM and Educational Robotics projects implementation." In M. Kalogiannakis & S. J. Papadakis (Eds.), Handbook of Research on Tools for Teaching Computational Thinking in P-12 Education. IGI Global. <https://doi.org/10.4018/978-1-7998-4576-8>
3. Χατζόπουλος, Α., Γεωργίου, Α., Κοτζιάς, Ι., Στεργιόπουλος, Α., & Σ., Τ. (2012). Βασικές γνώσεις χρήσης Τεχνολογιών Πληροφορικής και Επικοινωνιών. (Ι. Εγγλέζου, Ed.). Αθήνα: Άποψη Α.Ε.

## **C. PEER-REVIEWED CONFERENCE PAPERS (INTERNATIONAL)**

---

1. Chatzopoulos A., Papoutsidakis M., Kalogiannakis M., Psycharis S. (2020) Innovative Robot for Educational Robotics and STEM. In: Kumar V., Troussas C. (eds) Intelligent Tutoring Systems. ITS 2020. Lecture Notes in Computer Science, vol 12149. Springer, Cham. [https://doi.org/10.1007/978-3-030-49663-0\\_13](https://doi.org/10.1007/978-3-030-49663-0_13)
2. A. Chatzopoulos, I. - G. Dagkinis, N. Nikitakos, D. Papachristos, P. Kofinas (2019) "A Proposed Surveillance System using Drone on board for Piracy (Mass\_DronP)". MHCL 2019 Conference, XXIII International Conference on Material Handling, Constructions and Logistics (pp. 191–195), Bar, Montenegro, 1-2 July 2019

## **D. CONFERENCE PAPERS (NATIONAL)**

---

1. Χατζόπουλος, Α. (2021). Ανάπτυξη καινοτόμου εκπαιδευτικού ρομπότ για την Εκπαιδευτική Ρομποτική και την Εκπαίδευση STEM. In Ε. Κανταρτζή, Γ. Παπαδημητρίου, & Χ. Κωσταρής (Eds.), 5ο Πανελλήνιο Συνέδριο : Εκπαίδευση στον 21ο αιώνα: Ανάπτυξη της κριτικής σκέψης, της δημιουργικότητας και της καινοτομίας (Vol. Ε, pp. 774–783). Αθήνα: Μουσείο Σχολικής Ζωής και Εκπαίδευσης του ΕΚΕΔΙΣΥ.

2. Χατζόπουλος, Α., Παπουτσιδάκης, Μ., Καλογιαννάκης, Μ., & Ψυχάρης, Σ. (2018). Ανάπτυξη ρομποτικής πλατφόρμας χαμηλού κόστους, βασισμένη στην αξιοποίηση των ευρημάτων έρευνας δράσης για την εκπαίδευση STEM και την Εκπαιδευτική Ρομποτική. In Πανελλήνιο Συνέδριο Scientix για την εκπαίδευση STEM (pp. 7–13). Αθήνα.
3. D. Koikas, A. Aggelis, A. Chatzopoulos (2015). "Rebuilding a CNC Milling Machine". Proceedings of the Engineering Session of International Scientific Conference eRA – 10, Athens, 23 – 25 September 2015
4. G. Priniotakis, I. Chronis, A. Chatzopoulos, E. Louris (2015) "Lilipad Arduino platform for a multifunctional garments and wearables laboratory course". Proceedings of the 15th AUTEX World Textile Conference 2015, Bucharest, June 10-12, 2015
5. Avraam Xatzopoulos, Michail Papoutsidakis, George Chamilothis (2013) "Mobile Robotic Platforms as Educational Tools in Mechatronics Engineering". Proceedings of the Production Control Session of International Scientific Conference eRA – 8, Athens, 23 – 25 September 2013

#### **E. OTHER PAPERS AND WORKS**

---

1. Α. Χατζόπουλος (2021). "Μη τεχνικές δεξιότητες στην 4<sup>η</sup> Βιομηχανική Επανάσταση". Περιοδικό Μετάδοση Ισχύος, Μάρτιος – Απρίλιος 2021
2. Α. Χατζόπουλος, Δ.Παπαχρήστος, Ν. Νικητάκος (2017) "Shipping Mechatronics. Η Εισαγωγή της Μηχατρονικής στη Ναυτιλία". Περιοδικό Σύγχρονη Τεχνική Επιθεώρηση Τεύχος 275 Μάρτιος - Απρίλιος 2017 Σελ 30-35
3. Α. Χατζόπουλος, Δ.Παπαχρήστος, Ν. Νικητάκος (2016). "Η Εισαγωγή της Μηχατρονικής στη Ναυτιλία (Shipping Mechatronics)". Ετήσια Συνάντηση Ναυτικής Τεχνολογίας 2016, ΕΛ.Ι.Ν.Τ. (Ελληνικό Ινστιτούτο Ναυτικής Τεχνολογίας), Ίδρυμα Ευγενίδου, Αθήνα, 22-23 Νοεμβρίου 2016

#### **F. CITATIONS**

---

Received 78 citations (2021), *h*-index: 5