Constantine J. Aivalis

Curriculum Vitae

Date of birth	: 26 December 1954
Address	: Persea & Andromeda Str. 9,
	Sterianos - Vasilies,
	71500 Heraklion
	Crete, Greece
Phone	: +30 2810 236994
Mobile	: +30 6944 437265
E-mail address	: costis@hmu.gr

Professional Summary

Has developed, designed, and supported many software applications over the years. Is in the process of learning new platforms and technological changes. Has taught courses and seminars for almost all levels of education. Specializes in Web Analytics, Middleware and Big Data.

Education & Qualifications

2020	PhD: Department of Informatics and Telecommunications, University of Peloponnese in Web Analytics. The title of his doctoral dissertation is: "Advances in Metrics and E-Commerce Evaluation Techniques".
2011	Master's Degree: Graphic Arts / Multimedia Curriculum, Greek Open University. The title of his master's thesis is: "Web-to-Print and Print Media Production Content Management Systems".
1983	Basic degree: "Diplom Informatiker" (Informatics), Technical University of West Berlin, Germany. Dissertation title: "Implementation and Application of a Transportation Routing and Multi-Depot Analysis Algorithm".
	Emphasis on: Software Engineering, Database Management Systems, Systems Analysis, System Dynamics, Information Systems and Networks & Communications.
1974-1979	Graz Technical University, Austria Technical Mathematics

1973	State Degree in Programming, Certified by the Ministry of Education.
1972-1973	Vocational School Programmer Degree: "Software SA, Dr. Timoleon Pampoukas" Duration of Studies: 9 Months. Intensive course with 36 teaching hours per week.
1960-1972	High school diploma: Moraitis School, Technological Direction.

Foreign Languages

English and German fluently.

Activities

- Member of GI, «Gesellschaft für Informatik», Germany
- Member of the Hellenic Society of Scientists and Professionals in Informatics and Communications (EPY)
- Advisor of the Program Committee of the Municipality of Heraklion from 1987 to 1991
- Member of the organizing committee of the IFITT International Federation for Information Technology and Travel & Tourism since 1994 (Austria)
- Member of Stack-Overflow (Web link), reputation: top 3%

Current Position

Hellenic Mediterranean University in Heraklion, Department of Electrical and Computer Engineering as an Assistant Professor**.**

Teaches the Undergraduate courses:
Web Application Evaluation Systems,
Data and Information Visualization,
Object Oriented Programming (Java),
Programming with Python.

In the Postgraduate Program:
Advanced Software Engineering & Big Data Modeling Big Data.

Supervises many dissertations.

Work Experience

2008   Technical Officer and developer for the "E-Commerce Center" program for the Lassithi Chamber of Commerce.

2006   Labyrinthmusic
Technological Research Center: Construction of Labyrinth Music Laboratory Portal www.labyrinthmusic.gr and Java automatic SMS communication system.

2005   Cohesion Interreg
Design and implementation of the interactive Portal Cohesion for the program Interreg III B - CADSES (European Regional Development Fund), for collaborative promotion of the characteristics of wine produced in Central and Southern European countries. http://www.cohesion.gr

1985 - 2000 Software Art
Developer - Analyst specializing in software development and support in Unix, Linux, MS-DOS, and MS-Windows environments. As well as network design and support.
Basic products:
Art-Hotel, Front- and back-office Hotel System, Warehouse System, Medical File System and Statistics for Primary Care (Health Centers) for the Department of Social Medicine of the University of Crete, many commercial and financial applications.

1995 - 1998 COREM
Associate partner in the project COREM TR 1014, (Telematics Applications Program, TAP, 4th Framework Program for RTD & D) Cooperative Resource Management for the Transport of Unit Loads, of the General Directorate 13 of the Community, in collaboration with the Institute of Shipping Economics and Logistics of the University Bremen (DE), BLG Container GmbH & Co. (DE), National Center de la Recherche Scientifique / ARAMIIHS (FR), EKB Container Logistics (DE), Helsinki University of Technology (FI), TRADEMCO (GR) and University of Liège (BE) Construction of a ferry reservation scheduling and management system for unaccompanied cargo.

1994 – 1995
Technical manager of the project "Implementation of the Transport Network" of the Telematics II program of the Community, with the object of the study and implementation of a distributed application and a Broadband Network for the transport of goods. The implementation took place in the UNIX environment. The network was built to connect Heraklion, Athens, Patras, and Thessaloniki and to support Industries, traders as well as Transport Companies in the above cities in collaboration with the Hellenic Industries Association and ELANET.

1985 - 1993 University of Maryland
Has taught many courses and seminars for the University of Maryland, European Division at the American Base of Heraklion, and Souda Bay, such as Computer Programming, Data Structures, Management Information Systems, Decision Support Systems, and numerous weekend seminars.

1984 - 1994 FORTH – Institute of Computer Science
He worked as an employee for the Institute of Informatics of Crete since its foundation in 1984, as a Special Technical Scientist, Analyst-Programmer. Designed and built applications such as Water Supply Software System for Municipalities and Communities, Registry Management Application for the Central Union of Chambers of Greece as well as a medical record system for hospitals.
Has worked as a business consultant for public and private companies.

1983   Greek Navy
Military service. Worked as an Analyst and Programmer for the Navy Headquarters in Athens. He wrote management applications for contract employees and a custom application calculating Ammunition Consumption Statistics in COBOL for Honeywell-Bull Level 64 and Level 6 (Mini-6) computers with GCOS.

1982   ASM
Analyst Developer at ASM (Anwender Software Minnhof, Software House) in what is then West Berlin. Subject of Work: Automated Taxi Call Management System for the city of Berlin as well as commercial applications.
Working Duration: 7 months

1980 - 1981 CMP
Analyst Programmer at CMP (Computer Gestuetztes Management und Planung K.G. Software House) in what is then West Berlin.
Subject of Work: Online Multiuser System for dental clinics and transition of the FINK accounting system for hospitals, from IBM-370 COBOL to PDP-11 under RSX-11M.
Working Duration: 18 months

1979 - 1980 BRS
Analyst Developer at BRS, (Joerg Steglich Software House), West Berlin.
Subject of Work: Accounting Applications in Honeywell-Bull Level 64 GCOS and COBOL.
Working Duration: 7 months

1978 Software House Otto Knollmayr
Analyst Developer at Otto Knollmayr, Triumph Adler computer reseller in Graz, Austria.
Subject of Work: Accounting Applications and Warehouse System in TA-1000 and TA-20 computers in Assembly language and machine language.
Duration of work: 6 months.

1975   TST, Time Sharing Telecomputer, Hans Rehbein
Developer at Time Sharing Telecomputer A.G. Software House in Essen, Germany.
Subject of Work: Development of programs for approximate solutions of differential equations with numerical methods (Runge Kutta) in contract for the company Henkel AG, on Hewlett-Packard 1000.
Working Duration: 4 months.

1974   Victoria Versicherung AG
        Developer at Victoria Versicherung A.G., General Insurance Company in
        Duesseldorf, West Germany.
        Object of Work: Writing software for calculating mortality statistics for life insurance
        and insurance management issues such as customer record processing.
        FORTRAN IV and COBOL for IBM System / 360.
        Working Duration: 3 months.

Educational Experience

2021 (and since 1993)
        Lecturer at the Technological Educational Institute (TEI) in Heraklion
        Teaching Courses:
                Hotel Reservation Systems for Tourism Business students,
                Introduction to Informatics and PASCAL for Accounting students,
                Web Programming Topics,
                Object-oriented Java programming,
                IT Applications in Tourism,
                Digital image processing,
                Computer Programming,
                Data structures,
                Intoduction to Programming in Python,
                UNIX operating system,
                Introduction to the Internet and
                For the Postgraduate Program Advances in Image Processing.

 2008 Center of Professional Education - Chambers of Commerce
        Teaching Computer Networks. Duration 100 hours.

2007   Teaching Microsoft-Access ECDL level, for the Center of Professional Education of
        the Chambers of Commerce. Duration 25 hours.

2007   Center of Professional Education Mentor. Teaching a 100-hour program in Graphical
        Arts and Multimedia.

2006   University of Crete, Heraklion. Teaching the Java programming language in a LAEK
        100-hour program for professionals.

2002   Seminar in Excel and Internet for the program "Special Issues of Informatics" of the
        Ministry of Finance 1-11-2002 to 7-11-2002

2002   Teaching the course "Medical Informatics II" at PSE TEI of Crete

1997   Seminar at the University Hospital of Heraklion for the IT personnel on "UNIX
        installation and management".

1997   Seminar on the use of PowerPoint in civil servants for the Ministry of Education.

1997   Special 20-hour seminar for the computer department, on the management of SCO-
        UNIX and TCP / IP in Vathipetrou SA

1996   Seminar on the use of Windows in Vathipetrou SA

1995 (and since 1992)
Professor at the Public Vocational Training Institute (IEK) in Heraklion
Subject: xBase Programming (Clipper), Data Base Applications,
the COBOL language and the C language and INFORMIX SQL / 4GL.

1995   In-house 40-hour seminar on Windows 95 and local area networks for Vathipetrou SA

1995   In-house Seminar at Cretan Holidays, on specifications and requirements for
computerized reservation systems.

1994 (and since 1983) EL-KE-PA
He taught many programming seminars on general and specific IT topics in the hotel
company for the HELLENIC PRODUCTION CENTER (EL-KE-PA) in Athens and
Heraklion.

1994-1995 Technical Vocational High School "Prooptiki"
COBOL Professor.

1993 (and since 1985) University of Maryland, European Division
Full-time Professor of Computer Science at the University of Maryland, European
Division. He taught computer science courses for bachelor's degree in Computer
Science and Business Administration, as well as many computer science seminars at
the US Airforce and Navy bases in Heraklion and Souda Bay.

1993 Vathipetrou SA
80-hour in-house seminar on Windows, word processing and Spreadsheets for
Vathipetrou SA, Coca-Cola manufacturing and distribution industry in Heraklion.

1992 Chamber of Commerce in Heraklion
He taught an introductory seminar in informatics for entrepreneurs at the Chamber of
Heraklion.

1985 Municipality of Heraklion
He taught introduction to Informatics for employees of the Municipality of Heraklion.

1983 Mathematical Society
He taught a 100-hour seminar on computer programming for the Mathematical
Society of Athens, aimed at graduates of Mathematics and Physics to gain
proficiency in teaching Informatics for Secondary Education.

Studies

1985

Study of Computer Network design and construction of a Distributed Database for the Union of Chambers of Greece. The study was carried out on behalf of the Chamber of Heraklion and was followed by the construction and operation of a pilot computerized system on which the Member Registry system was based.

1993

Study for the construction of a General Use Database for tourism issues.

1993

Study and Proposal for the construction of a Telematic Transport Network. The proposal was submitted in collaboration with the Association of Industries of Crete and was executed as a subcontract of EUROSTATUS LTD. The proposal was approved by ELANET for the Community program TELEMATICS II.

1994

Study of automation and production control for the Rethymnon Citrus Producers Cooperative. The proposal was made to EOMMEX for the MINT program.

Publications

1. Theses

C. Aivalis, "Implementation and Application of a Procedure for the Closure of a Mixed Routing Problem". Bachelor's thesis. Computer science Department, Technical University of Berlin, November 1982.

C. Aivalis, "Web-to-print and Print Media Production Content Management Systems", Hellenic Open University, June 2011.

C. Aivalis, "Advances in Metrics and E-Commerce Evaluation Techniques". University of Peloponnese, May 2020.

2. Chapters in collective volumes

C. Aivalis: "The Contribution of Information and Communication Technologies in the Marketing of Alternative and Special Forms of Tourism. Alternative and Special Forms of Tourism". Edited by M. Sotiriadis, I. Farsari, Interbooks,, ISBN 978-960-390-205-8, 2009 (Web link)

C.J. Aivalis: "E-Commerce and Evaluation Metrics". "Collaboration in Tourism Businesses and Destinations. A Handbook". Edited by D. Gursoy, M. Saayman & M. Sotiriadis, Emerald Group Publishing Ltd ISBN 978-1-78350-811-2, 2015.

A.C. Boucouvalas, C. Aivalis, K. Gatziolis: "Integrating Retail and e-Commerce Using Web Analytics and Intelligent Sensors", Invited Paper, E-Business and Telecommunications: 12 International Joint Conference ICETE 2015, Colmar France,Editors: Mohammad S. Obaidat, Pascal Lorenz, Springer, ISBN 978-3-319-30222-5, 2016. (Web link)

C.J. Aivalis, K. Gatziolis, A.C. Boucouvalas: "Innovations in E-Systems for Business and Commerce", Edited by Seifedine Kadry, Abdelkhalak El Hami,
ISBN 9781771885645, Apple Academic Press, 2017.

C.J. Aivalis: "Big Data", Handbook of E-Tourism, Zheng Xiang, Matthias Fuchs, Ulrike Gretzel and Wolfram Höpken, Springer Verlag, 2020.

C.J. Aivalis: "Log file Analysis", Handbook of E-Tourism, Zheng Xiang, Matthias Fuchs, Ulrike Gretzel and Wolfram Höpken, Springer Verlag, 2020.
(under publication)

3. International Journals

E-marketing and E-commerce in the Tourism Industry: A Framework to Develop and Implement Business Initiatives, M. Soteriades, C.J. Aivalis, S. Varvaressos, Published in "Tourism Today" The Journal of the College of Tourism and Hotel Management Number 4 Autumn ISSN-1450-0906, 2004.

D. Karayannakis, C.J. Aivalis "Reciprocal Vieta-type formulas and some applications", Journal of Discrete Mathematical Sciences and Cryptography, Volume 21 Issue 1, 2018

4. International Conferences

M. Fioretos, C. Lionis, A. Koutis, C. Aivalis: "Computerizing Primary Healthcare in Greece", International Medical Conference Hellexpo, Thessaloniki 1995.

A.C. Boucouvalas, C.J. Aivalis "An E-shop Log File Analysis Toolbox" (2010 7th International Symposium on Communication Systems, Networks & Digital Signal Processing (CSNDSP 2010) Newcastle IEEE.

C.J. Aivalis, A.C. Boucouvalas: "Log File Analysis of E-commerce Systems in Rich Internet Web 2.0 Applications", 2011 15th Panhellenic Conference on Informatics, PCI 2011, IEEE

C.J. Aivalis, A.C. Boucouvalas: "Future Proof Analytics Techniques for Web 2.0 Applications" 2014 International Conference on Telecommunications and Multimedia (TEMU 2014), IEEE

A.C. Boucouvalas, C.J. Aivalis, K. Gatziolis: "Integrating retail and e-commerce using Web Analytics and intelligent sensors", International Conference on E-Business and Telecommunications 2015, Springer Cham

C.J. Aivalis, K. Gatziolis, A.C. Boucouvalas: "Evolving analytics for e-commerce applications: Utilizing big data and social media extensions", International Conference on Telecommunications and Multimedia 2016 (TEMU), IEEE

5. Various

C.J. Aivalis, D. Karayannakis, "On the equation x ^ x = α", academia.edu, August 2015 ([Web link](#))

Citations

Citations of the publications of Constantine Aivalis are available in the webpage of Google Scholar: ([Web link](#))