

Senior Software & Telecommunications Engineer  
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Dr Apostolos Georgiadis completed his studies at the Department of **Computer Engineering & Informatics, University of Patras**, Greece, in 1995 with honors (87%). He then completed a six-month research contract with the Group of Machine Imaging and Intelligence (MI2) at the **University of Leuven**, Belgium, funded by the Greek State Scholarships Institute.

He then continued with his doctoral research studies at the **University of Edinburgh**, UK, with the Department of Electronics and Electrical Engineering – Signals and Systems Group, where he studied the problem of non-linear equalisation of telecommunication channel in impulsive noise environments. He received the **PhD diploma** in 2001.

From 2000 until 2002 he worked as a Research Associate at first and then as a **Research Fellow** with the Signals and Systems Group, **University of Edinburgh**, UK. During this period he did post doctoral research, funded by a £1.3 million contract with “**LG Electronics Inc**”, on advanced design techniques for 3G base-station receivers with interference cancellation. He also investigated the problem of minimum bit-error ratio equalisers in alpha-stable impulsive noise environments.

Dr Georgiadis is a professional **Software Engineer**, having served as **Chief Technical Officer** and **Head of the Research & Development** Department in high-tech software development companies (*MegaSoft, Intelligent-Read, SBOING.net*), while recently he founded his own Software company *FlexIS*.

Dr Georgiadis has a long record of experience in the design and development of commercial and scientific software, with a sound background on all edge technologies and platforms (C/C++/C# .NET, ASP.NET, Objective-C, Javascript, PHP, Windows, Unix/Linux, OSX, Windows Mobile/Phone, iOS, Android, Java, SQL etc). He is the author of numerous desktop, web and mobile applications, spanning the fields of **Commercial Management, GIS, GPS Navigation, Big Data Web applications and services, scientific & AI applications, Visualization** and many others.

Since 2002 he also works as a part-time Lecturer at the Department of Telecommunications & Informatics, Technical University of Serres, Greece. In 2004 he won a 12-month post-doctoral scholarship from the Greek State Scholarships Institute, in order to investigate advanced channel optimization techniques for 3G receivers. He also did research on Software Defined Radio, and recently he produced some very interesting new research results on the problem of sea bottom classification using two dimensional wavelet coefficient statistics.

He has authored and co-authored numerous scientific papers, in scientific, peer-reviewed, journals and conferences.

**Recently, he obtained two on-line postgraduate degrees from the Universities of Berkley and Stanford on Software Engineering, Software as a Service and Cryptography**, respectively.

### PROFESSIONAL HISTORY

2016 – Today	NopServices <i>Solution Architect – Data Analyst: web &amp; mobile applications, Big Data, ASP.net Development, machine learning (E-commerce Advisor)</i>
2012 – 2016	SBOING.net <i>Senior R&amp;D Engineer on: a) crowd-sourced GPS Navigator on iOS &amp; Android platforms, b) proprietary Big-Data DataBase development for the SBOING back-end</i>
2012 – Today	MSc Lecturer at the Technical Educational Institute of Serres, Greece – Informatics & Comms Dept MSc Courses: a) Coding Theory and Error Correction, b) Advanced Mobile & Web Software Development
2002 – 2012	Teaching Associate with the Technical Educational Institute of Serres, Greece – Informatics & Comms Dept Courses: a) <i>Communications I</i> , b) <i>Communications Lab I &amp; II</i> , c) <i>Mobile Communications Lab</i>
2003 – 2011	Chairman of the Research & Development Group with Megasoft Informatics SA, Greece <i>Senior Software Engineer on: Business Applications, Embedded Systems and Mobile Applications</i>
Jan 2004 – Dec 2004	Post-Doctoral Scholarship from the Hellenic State Institute of Scholarships Research Fellow on «Advanced Receivers for the UTRA-FDD: a) advanced channel estimation techniques for the UTRA-FDD uplink, b) Chip-rate channel equalisation for UTRA-FDD downlink»
Sep 2001 – May 2002	Research Fellow with the University of Edinburgh, Electronics & Electrical Engineering Dept, UK Research on a) multiple access interference cancellation techniques for 3G base-stations, and b) minimum-BER linear equalisers in impulsive noise environment.
Sep 2000 – Sep 2001	Research Associate on a joint £1.5M LG Electronics Inc & University of Edinburgh, UK contract Analysis, development and simulation of 3G base-station architectures for enhanced multi-user detection for the UTRA-FDD.

### EDUCATION

2012	Postgraduate MooC from Univ. of <b>Berkeley</b> and Univ. of <b>Stanford</b> , USA <ul style="list-style-type: none"><li>• <i>Software as a Service (score: 2097.6 out of a maximum of 2126)</i></li><li>• <i>Cryptography (score: 178 out of a maximum of 183)</i></li></ul>
1997-2000	PhD from the University of <b>Edinburgh</b> , Electronics & Electrical Engineering Dept, UK «Adaptive Equalisation in Impulsive Noise Environments»
1990-1995	Computer & Informatics Engineering Diploma from the University of <b>Patras</b> , Faculty of Engineering, Greece Degree: Honours (86.9%)

### PUBLICATIONS

July 2008	Mavroudis T, Vardoulis G, Georgiadis A, Koukos I and Taroudakis M, “ <i>Two Dimensional Wavelet Coefficient Statistics for Sea Bottom Classification</i> ”, Acoustics 2008, July 2008, Paris, France.
May 2006	A Georgiadis, A Papatsoris, B Mulgrew, “ <i>MMSE Optimisation for LS Channel Estimation in Wideband DS-CDMA Rake Receivers</i> ”, ICASSP 2006, May 2006, Toulouse, France.
Apr 2006	A Georgiadis, A Papatsoris, B Mulgrew, “ <i>Channel Estimation Optimisation in Wideband DS-CDMA Rake Receivers</i> ”, European Wireless 2006, Apr 2006, Athens, Greece.
Jun 2005	V Bhatia, B Mulgrew, A Georgiadis, “ <i>Stochastic Gradient Algorithms for Equalisation in Alpha Stable Noise</i> ”, Signal Processing Journal, Elsevier publications: <i>Accepted for publication on 17 June 2005</i>
Mar 2005	H Mihailidis, K Sakalis, G Vardoulis, I Koukos, A Georgiadis, “ <i>Software Defined Radio Technology: Basic principles, developments &amp; potential</i> ”, 1 <sup>st</sup> Hellenic Conference of Electrical Engineers, Mar 2005, Athens, Greece
Sep 2004	V Bhatia, B Mulgrew, A Georgiadis, “ <i>Minimum BER DFE Equalizer in Alpha-stable Noise</i> ”, EUSIPCO 2004, Sept 2004, Vienna, Austria.

Dec 2002	A Georgiadis, B Mulgrew, "An Algorithm for Minimizing BER in Alpha Stable Noise", 2 <sup>nd</sup> I.M.A. conference on Mathematics in Telecommunications, Dec 2002, Lancaster, UK.
Aug 2001	A Georgiadis, B Mulgrew, "Adaptive Bayesian Decision Feedback Equaliser for Alpha—Stable Noise Environments", Signal Processing Journal, Elsevier publications, vol 81, no 8, pp 1603-1623, <i>invited paper</i>
Sep 1999	A Georgiadis, B Mulgrew, "A Family of Recursive Algorithms for Channel Identification in Alpha-Stable Noise", 5 <sup>th</sup> Bayona workshop on <i>Emerging Technologies in Telecommunications</i> , Sept 1999, Vigo, Spain.
Dec 1998	A Georgiadis, B Mulgrew, "A MAP Equaliser for Impulsive Noise Environments", 1 <sup>st</sup> I.M.A. conference on Mathematics in Telecommunications, Dec 1998, Loughborough, UK.

## SOFTWARE DEVELOPMENT SKILLS

Unix/Linux Platforms	<ul style="list-style-type: none"> <li>• C, C++, Java</li> <li>• command-line scripting</li> <li>• mySQL, postgreSQL</li> </ul>
MS Platforms	<ul style="list-style-type: none"> <li>• .NET (C#, VB.NET) for Windows and Windows Mobile/Phone</li> <li>• MS SQL Server</li> <li>• Crystal Reports</li> </ul>
Web	<ul style="list-style-type: none"> <li>• HTML, HTML5, CSS</li> <li>• Javascript, jQuery</li> <li>• PHP</li> <li>• ASP.NET</li> <li>• AJAX</li> <li>• Web Services – SOAP, REST</li> </ul>
OSX & iOS	<ul style="list-style-type: none"> <li>• Objective C#</li> <li>• OSX &amp; iOS apps</li> </ul>
Android Embedded Platforms	<ul style="list-style-type: none"> <li>• Java</li> <li>• Assembly</li> <li>• µControllers</li> </ul>
Revision Control	<ul style="list-style-type: none"> <li>• git</li> <li>• Team Foundation Server</li> </ul>
Scientific Platforms	<ul style="list-style-type: none"> <li>• Matlab</li> <li>• Maple</li> </ul>
Word Processing	<ul style="list-style-type: none"> <li>• LaTeX</li> </ul>

## GENERAL

Music	<ul style="list-style-type: none"> <li>• Has studied and plays the: <ul style="list-style-type: none"> <li>◦ Classical &amp; Electric Guitar</li> <li>◦ Bouzouki</li> <li>◦ Violin</li> </ul> </li> <li>• Member of the Philharmonic Orchestra in his home town (Hrysoupolis, Kavala, Greece)</li> <li>• Appeared at the Edinburgh Fringe Festival in 2000 with the group <i>Tinella</i>.</li> </ul>
Fluent Languages	<ul style="list-style-type: none"> <li>• Greek (mother tongue)</li> <li>• English (PhD in English, University of Cambridge FCE, IELTS)</li> </ul>
Membership	<ul style="list-style-type: none"> <li>• Institute of Engineering &amp; Technology (IET), former IEE.</li> <li>• Hellenic Chamber of Engineering (TEE)</li> </ul>

## REFERENCES

**Prof. Bernard Mulgrew**  
Professor & Deputy Director of Research. Department of Electronics & Electrical Engineering, King's Buildings, Edinburgh EH9 3JL, UK  
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