

Last Updated: 20-July2010

Evangelinos P Mariatos

This is a brief resume of Evangelinos (Vagelis) Mariatos, including working experience and education, with some reference to executed projects. For more information, a list of publications is also available.

Tel: +30 6945 934408

Email: emariatos@gmail.com

Addr: Stadiou & Kilkis Str. 26504, Kato Kastritsi, Rion, Greece

Current: T.E.I. of Messolonghi, Dpt of Telecom Systems & Networks

Real-Time Systems

Sept 2008 -

Present

- Introduction to Real time Systems for Event Processing and Media Transport
- Lab course: Modeling and Analysis of Real Time Systems

Current: Diaplous Ltd.

Nov 2005 - Present

Co-founder & Operations Manager

Project: DMV02 Smart Camera

- Design and development of an FPGA-based smart camera for industrial inspection systems.

Project: DMV03 ASIC

- Design and development of a dual-core system-on-chip for Visual Perception.

Other Tasks

- Day-to-day management of the company, Participation in Shows & Exhibitions, Customer Relationships, Strategic Planning etc.

2002-2005: Freelance Engineer

Jun 2002 - Oct 2005

Project: WLAN ASIC

- Design and development of a System-on-chip for Wireless LAN. The project was done for a major telecoms firm, and involved development of the SDRAM controller, a special DMA unit and a two-bus architecture around an ARM9 and an ARM7 RISC core. It also involved specification and schematic design of a reference board for that chip.

Project: FrizzBee

- Development of Embedded C code for an ultra-low-power and ultra-low-cost node of self-organized dynamic networks, operating over the 802.14 MAC layer in random urban environments. The project was executed on behalf of a world-leader vendor of professional coolers.

1999-2002: GiGA Hellas (an Intel company)

Sept 1999 - Dec 2000

Senior System Design Engineer

Project: Framer for Generic Optical Traffic at 2.5Gbps

- This project involved specification (based on discussion with the customer) and design of a custom framer FPGA for generic 2.5Gbps traffic. The FPGA was designed into the customers board, which also included mux/demux, clock/data recovery and optical interfaces.

Project: Generic Reference Design Control Module

- Through this project, a small form-factor module which provided configuration and control for the firms reference designs was developed. The work included digital design (FPGA), embedded software (embedded C and OS porting) and PCB schematic.

Project: 10Gbps PRBS Tester

- Design and development of a System for testing a link at 10Gbps. The project included FPGA and PCB design, as well as embedded software development.

Jan 2001 - May 2002

Embedded Group Leader

Project: RD2/RD3 Reference Designs

- The group developed two reference systems for the 10Gbps SONET/SDH and WDM framers of the company. Both systems were actual working boards with full software stacks and standard form factor - ready to be integrated into customer equipment.

Project: Internal Standardization of Embedded Software APIs and host interfaces

- As the framer chips of Intel were the first in the market, we had to specify and develop a set of internal standards for APIs and for Host interfaces. These standards were produced as a cooperation between our group, a corresponding group in the US and were reviewed by customers.

Other Tasks

- Group Management - The group had 7 engineers
- Customer Support in what regarded Reference Designs and APIs
- Communication with other groups in Intel
- Participation in coordination activities, exhibitions, FAE training etc.

1994-1999: Synergy Systems S.A.

Oct 1996 - Aug 1999

Quality Manager

- During this period, and in parallel to my other tasks in the company, I developed the quality management system. The QMS was applied to:
 - Project Planning & Tracking
 - Design of Embedded Software
 - Development of ASICs and FPGAs
 - Testing & Verification
 - Equipment Purchasing and Calibration
 - Information Systems
- The company quality management system was certified for ISO9001 in 1997.

Jan 1994 - Aug 1999

System Design Engineer

Project: CoCO (Configurable Coprocessors)

- A joint project with various companies (including ST and Inmos) for the development of a hybrid FPGA/Processor chip. Our company developed libraries of configurable hardware slices that could be integrated in a software application through a smart API.

Project: RADOM (a Rapid Prototyping System)

- We developed a system for rapid prototyping of integrated circuits using a modular architecture. Each module included FPGA resources, which were connected through a common AMBA-compliant backplane. Special Analogue / Mixed Signal modules as well as a processor module were also developed. A custom system design and partitioning graphical front end tool was also developed that supported preliminary design and documentation of the prototype system and also ensured that the design was directly transferable to ASIC implementation.

Other Tasks

- Porting of Embedded Operating Systems on Various Processors
- Digital Design for a number of smaller projects
- EDA tool management (specifically in what regards reusable part libraries)

Various other Projects

Between my graduation in 1992 and my work in Intel 1999, I also participated in a number of other projects, either as a freelancer or as part of my PhD-related obligations. Two of the most important ones are listed here:

Project: INSYDE

- A joint project with various companies (including Verilog and Alcatel) that created a tool set for design of integrated systems on chip. INSYDE was a pioneer in the 90s, as it provided an object oriented platform (based on UML and SDL) for concurrent specification and design of both software and hardware in a SoC. A major feature of the INSYDE approach was its tight integration with system documentation, verification and testing which practically covered the complete development effort under a formal notation and tool set.

Joint MCC/OMI Survey for Hardware-Software Codesign

- I was member of a group of 15 experts from the US and Europe which conducted a survey in more that 80 companies and more than 1000 research institutes for the state-of-art and the state-of-practice in hardware software co-design tools and methodologies. This survey was sponsored by the Open Microprocessor Systems Initiative in the EU and MCC in the United States.

Professional Details

Skills

- Spoken Languages: Greek, English (Cambridge Certificate of Proficiency)
- Programming Languages: Basic, Pascal, C, C++
- Hardware Description Languages: VHDL, Verilog

[Publications](#)

- A number of publications in International Conferences and Journals. If not attached to this resume, please ask for a copy of the relevant list.

Patents

- One International and two national patents awarded. Two more national patents filed. If you need more information please ask for a copy of the relevant list.

Education

- **University of Patras, Greece, Phd in Electrical Engineering and Computer Technology, 1998. Title of Thesis: "An Object Oriented Methodology for the Design of Hardware and Software in Embedded Systems"**
- **University of Patras, Greece, B.S., Physics, 1992**

Misc.

- **Family: Married since 1990, two kids 7 years old.**
- **Pets: I have a couple of Greek shepherd dogs.**
- **Hobbies: Climbing, Painting**
- **Community: Member of local association, volunteer for forest fire prevention.**