

*I am a software engineer doing a phd at the University of Glasgow, department of Electronic and Electric Engineering. My research is about modelling distributed artificial systems which self organize and develops a grounded communication language. I'm also an entrepreneur and inventor of 3 products for the market of assistive technologies MyDsReader (a voice synthesis software for the nintendo ds), EMMA (a wearbale sensor for fall detection), SafeDrive (a detector for drowsyness in car drivers).*

## ACADEMIC QUALIFICATIONS

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**09/2008~09/2010**

**Phd in artificial intelligence**

**University of Glasgow**

**Main objective:** developing theories and models for the formation of language in social systems based on artificial agents.

**Additional training received:** Team management, Project Management, Presentation Skills, Intellectual Property, Innovation and Enterprise

### **Additional Teaching and tutoring experience**

Lab demonstrator for Digital Signal Processing I (3 years): the course is about the design and implementation of analogic and digital filters for audio processing (hearing enhancement, DTMF coding/econding, voice coders)and ECG analysis (noise filtering and heart beat detection).

Lab demonstrator in Digital Signal Processing II (1 year): algorithms for image and video real time processing.

### **Scientific publications:**

- ❖ Di Prodi P, Porr B and Wörgötter F (2009). A novel information measure to understand differentiation in social systems. *Frontiers in Computational Neuroscience. Conference Abstract: Bernstein Conference on Computational Neuroscience.*
- ❖ Kulvicius T, Kolodziejcki C, Prodi P, Tamosiunaite M, Porr B and Wörgötter F (2008). On the analysis and evaluation of closed loop learning systems. *Frontiers in Computational Neuroscience. Conference Abstract: Bernstein Symposium 2008*
- ❖ Di Prodi P, Power CF and Wei PY (2009). Extending the reach of Mental Health Services through eLearning technology and other communication mediums centralized on one Online ePlatform. *Frontiers in Neuroengineering. Conference Abstract: Annual CyberTherapy and CyberPsychology 2009 conference*
- ❖ Di Prodi, P. Porr, B. Worgotter, F. (2008) Adaptive Communication Promotes Sub-system Formation in a Multi Agent System with Limited Resources. In: Learning and Adaptive Behaviors for Robotic Systems, 2008. LAB-RS '08. ECSIS Symposium
- ❖ McCabe L., Porr B., Di Prodi P. & Woergoetter F. (2008) OBSERVING STDP OF PYRAMIDAL CELL AND ATTACHED INTERNEURON MICROCIRCUIT USING DETAILED CA2+ DYNAMICS.
- ❖ McCabe, L., Di Prodi, P., Porr, B. and Woergoetter, F. (2007) Shaping of STDP curve by interneuron and Ca2+ dynamics. Proceedings of the sixteenth annual computational neuroscience meeting CNS\*2007, Toronto.

- 02/2008**      **Master degree in Information and Automatic engineering**      **Italy**  
**Score: 110/110**  
The master in Italy has a length of 2 years and it involves .The Master Thesis was developed in the University of Glasgow as an Erasmus student. Developed a computational model for the working memory of the prefrontal cortex. The model gives prediction on the effect of drugs like PCP and ketamine on the effect of working memory impairment.  
Conference: CNS Toronto poster and talk about working memory models
- 09/2004**      **Bachelor degree in Information and Automatic engineering**      **Italy**  
**Score: 110/110 + academic distinction**  
The Bachelor (3 years) gives the basics in engineering and the specific subjects for information theory and theory of control systems.  
Results: developed a real time 3-axis sensor for the estimation of position of the human body limbs

## PROFESSIONAL TRAINING

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- 06/2009~07/2009**      **[Ignite Business Programme, Cambridge](#)**  
Ignite is an intensive, one week training programme for aspiring entrepreneurs and corporate innovators to trial and prepare business ideas for the commercial environment. It is comprised of a blend of practical teaching sessions, expert clinics, mentors' sessions and experienced advice and support from leading entrepreneurs and innovators that will give you the tools, contacts and confidence to transform your idea into a successful business project or venture.
- 03/2009~06/2009**      **[NESTA-Starter for Six, Glasgow](#)**  
Starter for 6 is a highly successful enterprise training programme that supports up-and-coming creative entrepreneurs across Scotland.
- 11/2009~11/2009**      **[Global Sales Strategies, Heriott Watt University](#)**  
Global Sales Strategies for Ambitious Entrepreneurs, a high quality seminar and workshop for Entrepreneurs, CEOs and their business executives from innovative, fast-growing companies, featuring case studies and lectures, interactive discussions, participants presentations, "hands-on" exercises, and the opportunity to practice "elevator sales pitches" to potential customers.
- 10/2008**      **[Hunter centre for entrepreneurship: University of Strathclyde](#)**  
Provided basis to develop leadership, accounting & finance skills intellectual property awareness, and the study of real business test cases. Attended Workshops with successful entrepreneurs.
- 10/2008**      **Into the world of business: Buchanan Arms, Loch Lomond**  
The course aims at marketing technology, patenting and understanding venture capitalist. Successfully finished the business challenge between the 4 teams and secured 500 pounds for the best pitch.

## ACHIEVEMENTS

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- Winner in the **The Big Bash 2009 Competition** of University of Glasgow for the creativity business idea: EMMA a wearable device to detect domestic accidents in elders.

## SPECIALITIES

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### Software programming:

Java SE and Mobile edition:

10 years experience in developing software for desktop and mobile phones. Extensive knowledge of NetBeans, Eclipse environments and Java Foundation classes.

C\C++ ANSI:

14 years experience in developing software for desktop and embedded architectures. Extensive knowledge of Microsoft Visual Studio, DevShed, KDevelop and other GPL IDEs and tools.

### Architecture knowledge:

Java Virtual Machine, Windows DOS, Windows XP, Windows NT, Ubuntu/ Linux. Developed user space modules for windows and linux operative systems.

### Hardware programming:

Familiar with PIC, ARM (7,8,9 Cortex), Atmel AVR and platforms like Arduino, Xduino, IAR Workbench, WinAVR, AVRStudio.

### Electronic Design:

1 year of experience in Eagle CAD for schematic and layout design

Low level skills: familiar with reversing of Intel and AMD assembly language. Debugging and reversing in user space of windows PE executables.

### Language:

Italian as mother tongue, English second language and Chinese Mandarin as beginner level at the [Language Centre Glasgow](#).

## PROFESSIONAL EXPERIENCE

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**10/2008~ 11/2009**

**CTO**

**Robomotic (Start-up),**

**Glasgow**

Founded Robomotic to license concept stage designs and products for the health care market. Robomotic design and implemented at the prototype stage:

- [Ellipse](#): a connected high tech time piece for the modern business traveler, was featured on Yanko Design, presented at the eCreative London 2009 exhibition and is now enlisted for the Red Dot Design.
- [SafeDrive](#): an automatic detector to avoid car accidents due to drowsy drivers
- [MyDsReader](#): a program for the nintendo ds that converts text file in synthetic voice. Winner of the Big Idea Competition 2008. MyDsReader is now a GPL software on sourceforge.net and is being ported to other mobile devices like the iPhone and Android.
- [EMMA](#): a wearable sensor for detecting falls in elders with advanced adaptive models of human walk. Winner of the Big Idea Competition 2009.

**03/2005~ 09/2008**

**Co-founder**

**China Global Sales,**

**Italy-Hong Kong**

Developed awareness of supplier chain and European standards for electronic devices on behalf of China Global Sales. Developed the policy to select suppliers for multimedia products and attend international events like the Canton Fair in 2005 and 2006. In Q4 of 2008 Malca sold 1189 products for a total revenue of 20582 EUR. In Q1 of 2009 Malca sold 1458 products for a revenue of 11355 EUR.

**07/2005~ 09/2005**

**Internship**

**Thales CSF**

**Italy**

Internship in Thales Land & Joint systems: designed and developed an internal project collaborative web portal (SmartCVS) for the R&D team of the company.

## REFERENCES

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***Mr. Greig Sinclair -Student Enterprise Manager in University of Glasgow***

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