

Bruno José Duro Batista  
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Coimbra, 30<sup>th</sup>. April 2008

My name is Bruno Batista and I want to apply for admission to MAP-i.

I refer to annex my *Statement of Purpose* and *Resume*, being available for additional information.

The *three letters of recommendation* will be sent directly to you by email by the recommenders.

Best regards,

Bruno Batista

## **Statement of purpose**

My name is Bruno Batista, I have studied computer science in Universidade de Aveiro (University of Aveiro), I took a post graduate in informatics in Universidade de Coimbra (University of Coimbra). After this I started a Master Degree in informatics in Universidade de Coimbra (University of Coimbra), I've completed the first year of studies and I started the dissertation which I didn't finish due to some lack of time, I started a new challenge: have my own company, and the recent changes in the education system (Bologna's process).

In the last few years I worked in a few places: I had a research scholarship in Departamento de Matemática da Universidade de Aveiro (Mathematical Department of University of Aveiro), I worked as programmer in a software engineering company (Meticube) and I lectured in Escola Superior de Tecnologia e Gestão de Oliveira do Hospital (Oliveira do Hospital College of Technology and Management, Polytechnic Institute of Coimbra). Currently I work in a company, where I am partner, which focuses mostly in two key areas: Biometrics and Radio Frequency Identification (RFID). We develop solutions based on these technologies for manufacturing, logistics and health care. At the same time I teach two subjects related to informatics at ESTGOH.

I believe research activities are fundamental for companies that wish to have something to say on the market today, therefore my motivation to endeavor in this PhD is simple to explain: I have the time, the enthusiasm and I believe it's a natural step for my personal and professional growth and for the company.

My main areas of interest are all related with RFID but if I have to choose I'll say Real Time Location Systems (RTLS). These systems will become essential in the next few years in all kinds of areas, from security to health care or child care. There are lots of work to be done, for instance increase precision of location algorithms, combine different technologies (active RFID, Zigbee, WiFi, GPS, etc) or make algorithms faster and computationally more effective. I believe that this doctoral program can provide me useful knowledge in this area.

Coimbra, 30<sup>th</sup>. April 2008

Bruno José Duro Batista

## Curriculum Vitae

### Personal information

First name / Surname(s)	Bruno José Duro Batista
Address	Rua José Castilho, Lote 21, 2°C, 3030-301 Coimbra, Portugal
Telephones	+351916224784
E-mail	<a href="mailto:bruno.batista@logicpulse.pt">bruno.batista@logicpulse.pt</a>
Nationality	Portuguese
Date of born	17-09-1977
Identification Card	11066721
Driving license	Category of vehicle B

### Work experience

**2007** →

Occupation or position held	Founder of LogicPulse Technologies, Engineering Director
Main activities and responsibilities	Project Manager, Design and analysis of informatics Systems, Elaboration of Technical and commercial proposals, Management duties.
Name of employer	LogicPulse Technologies, Lda.

**2007/2008**

Occupation or position held	Assistant Professor
Main activities and responsibilities	Responsible teacher of the fouling disciplines: Multimedia Design and Informatics Engineering.
Name of employer	Escola Superior de Tecnologia e Gestão de Oliveira do Hospital do Instituto Politécnico de Coimbra (Oliveira do Hospital College of Technology and Management, Polytechnic Institute of Coimbra)

**2006/2007**

Occupation or position held	Assistant Professor
Main activities and responsibilities	Responsible teacher of the fouling Lectures: Application Development I and II, Software Engineering, Multimedia Content and Applied Mathematics.
Name of employer	Escola Superior de Tecnologia e Gestão de Oliveira do Hospital do Instituto Politécnico de Coimbra (Oliveira do Hospital College of Technology and Management, Polytechnic Institute of Coimbra)

**2004/2005 e 2005/2006**

Occupation or position held	Assistant Professor
Main activities and responsibilities	Responsible teacher of the fouling Lectures: Application Development I and II, Software Engineering, Multimedia Content and Informatics I.
Name of employer	Escola Superior de Tecnologia e Gestão de Oliveira do Hospital do Instituto Politécnico de Coimbra (Oliveira do Hospital College of Technology and Management, Polytechnic Institute of Coimbra)

**2004**

Occupation or position held	Programmer
Main activities and responsibilities	Belonged to the team that develop the application "eLV" to the company REFER (Portuguese railway company). This application intended to automate the speed limitations of trains.
Name of employer	Meticube, Sistemas de Informação, Comunicação e Multimédia.

**2004**

Occupation or position held	Collaborator
Main activities and responsibilities	Collaboration in Data Warehouse Striping project. The main goal of the Project was to develop a distributed database in order to increase the performance with small cost.
Name of employer	Critical Software.

**2004**  
Occupation or position held: Researcher at project Geometrix.  
Main activities and responsibilities: Team leader of the programmers that started the development of the educative game "BioMat."  
Name of employer: Universidade de Aveiro (University of Aveiro)

**2003**  
Occupation or position held: Researcher at project Geometrix  
Main activities and responsibilities: Belonged to the team that developed the educative game "Ecotoons". This is a math game for children of 6 to 9 years old. The game was put in the market in December of 2003.  
Name of employer: Universidade de Aveiro (University of Aveiro)

**2003**  
Occupation or position held: Monitor  
Main activities and responsibilities: Lecture a programming subject (Visual Basic and Java) for BSc in Matemática Aplicada e Computação in Departamento de Matemática da Universidade de Aveiro (Mathematics Department of University of Aveiro).  
Name of employer: Universidade de Aveiro (University of Aveiro)

**2001/2002**  
Occupation or position held: Researcher at project Geometrix  
Main activities and responsibilities: Belonged to the team that stated developing the educative games, "AEI7/12" and "Via Geométrica". The technologies used were Visual Basic and Microsoft DirectX.  
Name of employer: Universidade de Aveiro (University of Aveiro)

**2001/2002**  
Occupation or position held: Monitor  
Main activities and responsibilities: Lecture two programming subject for BSc in Matemática Aplicada e Computação in Departamento de Matemática da Universidade de Aveiro (Mathematics Department of University of Aveiro).  
Name of employer: Universidade de Aveiro (University of Aveiro)

**Education and training**

**2006**  
Name and type of organization providing education and training: Departamento de Informática da Faculdade de Ciências e Tecnologia da Universidade de Coimbra (Informatics Department of Science and Technologic Faculty of University of Coimbra)

**2003**  
Name and type of organization providing education and training: Post graduate in Informatics  
Departamento de Informática da Faculdade de Ciências e Tecnologia da Universidade de Coimbra (Informatics Department of Science and Technologic Faculty of University of Coimbra)

**2002**  
Name and type of organization providing education and training: BSc in Matemática Aplicada e Computação  
Departamento de Matemática da Universidade de Aveiro ( Mathematics Department of University of Aveiro)

**Personal skills and competences**

Mother tongue

Portuguese

Other languages  
Self-assessment

**English**  
**French**  
**Spanish**

Understanding		Speaking		Writing
Listening	Reading	Spoken interaction	Listening	Reading
Very Good	Very Good	Good	Good	Good
Medium	Medium	Medium	Medium	Weak
Very Good	Very Good	Good	Good	Medium

Technical skills related to programming	Pascal, C, Prolog, Java, Delphi, .Net (Visual Basic e C#), DirectX
Technical skill related to databases	SQL, SQL Server, MySQL, Oracle
Technical Skills related to multimedia and web design	Macromedia Freehand, Macromedia Flash, Macromedia Dreamweaver, Macromedia Director HTML, PHP, ASP .NET
Technical skills related to scientific software	Matlab, Matcad, Matemática
Other skills and competences	Advanced knowledge about photography. Design and photography for the CD "Baladas do Anos 90" and for the book "Código da Praxe" published by Conselho de Veteranos da Universidade de Coimbra. Photography covert of Queima das Fitas of Universidade de Coimbra in 2000.

Coimbra, 30<sup>th</sup>. of April of 2008



## PARECER

O Licenciado **Bruno José Duro Batista** esteve vinculado ao projecto *Geometrix* (Departamento de Matemática da Universidade de Aveiro). No referido projecto foi contratado como Bolseiro de Iniciação à Investigação e sobre a minha orientação desempenhou actividades de investigação relacionadas com a integração de bibliotecas e pacotes de software de Matemática (MatrixVB, MatCAD, etc.) e as suas possíveis aplicações em ferramentas desenvolvidas no âmbito do projecto, assim como a aplicação de pacotes de software de Geometria na construção de objectos dinâmicos para Web. No desempenho das suas funções como bolseiro o Bruno revelou excelente capacidade profissional, a par de muito interesse, zelo, competência e espírito criativo.

O Bruno também foi o meu aluno nas seguintes disciplinas do curso de Matemática Aplicada e Computação na Universidade de Aveiro:

- Linguagens e Ambientes de Programação.
- Álgebra Relacional e Bases de Dados.

Nestas disciplinas o Bruno obteve resultados muito positivos.

Em geral o Bruno revela um alto potencial que considero lhe permitirá continuar, com resultados positivos, o seu percurso em actividades académicas e de investigação vinculadas às Ciências da Computação.

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António Leslie Bajuelos Domínguez  
Professor Auxiliar  
Departamento de Matemática  
Universidade de Aveiro

Aveiro, 2 de Maio de 2008