



Stefano Benamati

Curriculum Vitae

Education

1998 **Bachelor's degree in computer science**, *Università degli studi di Verona*, Italy.

Bachelor's Thesis

Original title *Sviluppo di un ambiente software interattivo per l'addestramento e la validazione di architetture neurali basate sul processore TOTEM*

English title *Development of an interactive software environment for training and validation of neural architectures based on the TOTEM processor*

Supervisors Professor Letizia Tanca & Professor Giampietro Tecchiolli

Experience

2019–Present **Computer vision developer**, DVLEATHER, Montorso Vicentino, Italy.
Developed algorithms to detect defects on leather hides.

2013–Present **Co Founder and Development Director**, GLOVEAPP SOLUTIO LTDA, Rio de Janeiro, Brazil.
Software development on demand for clients worldwide (Brazil, Czech Republic, Italy, Malaysia, Russia, USA)

Achievements:

- Real time license plate reader based on OpenCV
- Trainable OCR
- Stereoscopic people counter for bus
- Car counter and average speed measurement
- Automatic object measurement
- Remote monitors (Arduino, GSM, sensors)
- License Plate Recognition: parking management
- Automatic flame measurement
- Automatic wire and mast detection
- Object tracking

- 2010–2013 **Programmer freelancer**, Rio de Janeiro, Brazil.
Developed software on demand for clients worldwide (Brazil, England, Germany, Italy, Singapore, Trinidad and Tobago, Turkey, USA).
- Achievements:
- Optical people counter
 - Automatic form reader
 - Ported a financial program from Linux to Windows
 - Software to read the level of a liquid using a camera
 - Software to recognize magazine covers from images taken with camera
- 2007–2010 **Senior Software Developer**, 4MR SOLUTIONS, Rio de Janeiro, Brazil.
Developed software for the automotive industry.
- Achievements:
- Developed OCR software
 - Developed a file system to record images from security cameras
 - Developed a lossless compressed image file format
 - Developed a client-server system that collects GPS data from an arbitrary number of vehicles on a route and calculates the optimal speed for each vehicle in order to keep them equispaced.
- 2004–2006 **Integration Engineer**, BENQ SIEMENS MOBILE, Kamp-Lintfort, Germany.
Member of the core integration team during the development of two UMTS phones.
- Achievements:
- Power measurements and validation of battery charging algorithms
- 2002–2004 **Co Founder and Senior Software Developer**, MS-LAB SRL, Trento, Italia.
Responsible for software development.
- Achievements:
- Developed firmware for embedded systems
 - Linux administration and programming
 - Member of the hardware debugging team
- 1999–2002 **Software developer**, NEURICAM SPA, Trento, Italia.
Programmer in artificial vision and neural network area.
- Achievements:
- Fully developed in assembly an overtake detector for the automotive industry
 - Developed firmware in assembly on RISC architectures
 - Created test procedures for prototypes and products
 - Member of the hardware debugging team (discrete systems and ASIC)
 - Created libraries for image processing under fixed point processors in pure assembly
- 1999–1999 **Software developer**, UNIVERSITÀ DI TRENTO *and* ISTITUTO NAZIONALE DI FISICA NUCLEARE, Trento, Italia.
Software development.
- Achievements:
- Developed software for an array of “neural PC” (training, generalization, load balance and interPC communication)

1998–1999 **Software developer**, UNIVERSITÀ DI TRENTO *and* CONSIGLIO NAZIONALE DELLE RICERCHE, Trento, Italia.

Software development.

Achievements:

- Developed software for an information retrieval system based on neural technologies

Projects

[Link YouTube](#) Automatic Number Plate Reader in real time

[Link YouTube](#) Car counter and speed measurement

[Link YouTube](#) Car counter processing at 300fps with 99.82% accuracy

[Link YouTube](#) Stereoscopic people counter for bus

[Link YouTube](#) Very simple object measurement

Skills

Languages C, C++, java, ARM assembly, perl, bash, sql, php, C#, html, css

OS Linux, Android, Microsoft Windows, Embedded Systems

Areas Automotive, real time image processing on embedded systems, neural computing (hardware and software), Android platform, concurrent programming, OpenCV

Communication Skills

2001 Oral Presentation of the TOTEM neural processor at Stuttgart Vision 2001

Languages

Italian **Mothertongue**

Portugues **Fluent**

English **Fluent**

German **Basic**

Basic words and phrases only