



# Stefano Benamati

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## 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*