Marcelo Armengot

Computer Vision *senior dev*

Madrid, Spain

(Profile picture from Dreambooth Stable Diffusion)

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Education

- **PhD in Astrophysics**
  Universidad Complutense de Madrid (2013 – 2016)
  Ultraviolet image processing for interstellar medium studies.

- **MSc in Computer Science and Computational Mathematics**
  Universitat de València (2004 – 2006)
  Facial recognition using PCA/LDA and Common Vector methods.

- **Bachelor's in Computer Science (5-year)**
  Universitat de València (1995 - 2000)
  Final project: Perl client/server app for GNU/Linux and Win32.

Publications

- **Signatures of diffuse interstellar gas in the Galaxy Evolution Explorer all-sky survey**
  Marcelo Armengot and Ana Inés Gómez de Castro **Astronomy and Astrophysics**, 2019.

- **MOSAIX: a tool to build large mosaics from GALEX images**
  Marcelo Armengot, Néstor Sánchez, Javier López-Santiago and Ana Inés Gómez de Castro **Astrophysics and Space Science**, 2014.

Conferences

- **Distribution of ISM features as per the GALEX all-sky survey** (*Marcelo Armengot and Ana Inés Gómez de Castro*) *Ultraviolet Sky Surveys "The needs and the means"*, 2017, Tel Aviv, Israel.

- **The properties of diffuse interstellar dust clouds as determined from GALEX and infrared (IRAS, Herschel) observations** (*Marcelo Armengot, Ana Inés Gómez de Castro, Javier López-Santiago and Néstor Sánchez*) *Highlights on Spanish Astrophysics IX*, XII Scientific Meeting of the Spanish Astronomical Society, 2016, Bilbao, Spain.

- **UV image processing to detect diffuse clouds** (*Marcelo Armengot, Ana Inés Gómez de Castro, Javier López-Santiago and Néstor Sánchez*) *XI Scientific Meeting of the Spanish Astronomical Society*, 2014, Teruel, Spain.

- **A GALEX based survey of the Taurus star forming region** (*Ana Inés Gómez De Castro, J. López Santiago, F. López-Martínez, N. Sánchez, P. Sestito, M. Armengot, E. de Castro, M. Cornide and J. Yañez-Gestoso*) *Protostars & Planets VI Workshop*, 2013, Heidelberg, Germany.

- **Adaptive kernel ridge regression for image denoising** (*Marcelo Armengot, Valero Laparra, Luis Gómez, Jesús Malo and Gustavo Camps-Valls*) *IEEE Workshop on Machine Learning for Signal Processing (MLSP)*, 2010, Kittilä, Finland.

- **Experiments about the Generalization Ability of Common Vector based methods for Face Recognition** (*Marcelo Armengot, Francesc Ferri and Wladimiro Diaz*) *7th International Workshop of Pattern Recognition in Information Systems (PRIS)*, in conjunction with ICEIS 2007, Funchal, Portugal.

Professional Experience

- **Senior Software Engineer — Indra** (*2023 – Present*)

  Real-time C++ (CUDA) Computer Vision multithreading subsystem.

- **Computer Vision Tech Lead — Izertis** (*2022 – 2023*)

  Led and developed Computer Vision projects.

- **Software Developer — Agerpix Technologies** (*2020 - 2022*)

  Image Processing and Machine Learning.

  Python, OpenCV, C++, R, QGIS, PostgreSQL, Shell scripting.

- **Software Developer — Xeridia** (*2019 — 2019*)

  C/C++/Pro*C Oracle on AIX for online banking.

- **Computer System Manager — Atlantida** (*2017 – 2019*)

  Remote support for multimedia servers onboard Renfe long-distance trains.

- **Computer System Manager — Universidad Complutense de Madrid** (*2012 – 2017*)

  Computer support for WSO-UV project (servers, Perl, shell scripting).

  Research on ultraviolet image processing with a focus on the WSO-UV project.

- **Research Staff — Universitat de València** (*2009 – 2011*)

  Kernel methods, regression, clustering, image denoising, neural networks.

  Image processing research at IPL (ipl.uv.es).

- **Research Staff — Instituto Tecnológico de Informática (ITI)** (*2007 – 2009*)

  C/C++, biometric libraries, optimization, OpenCV, surveillance projects.

- **Research Scholar — Universitat de València** (*2004 – 2007*)

  Scheduling software (Delphi/C), C/GTK frontend for Graphviz dot graphs.

  E-learning platform, helpdesk, webmaster.

Skills

- **Programming Languages:** C/C++, Python, Perl, Matlab, R, PHP.
- **Web & Markup:** HTML/CSS, LaTeX.
- **Operating Systems:** Unix, Linux; shell scripting, awk.
- **Databases:** Oracle, PostgreSQL, MySQL.
- **Version Control & IDEs:** Git, SVN, Eclipse.
- **Project Management Tools:** Jira, Confluence.

Personal Interests

- Passionate about **cinema**, **creative writing** and **cooking**.
- Enjoy swimming, writing songs and playing the piano. My piano album on Jamendo: *Piano Demo*.
- Maintain a personal blog with thoughts, code and geeky stuff: nerdinmadrid.tumblr.com.
- Regular gamer – into both retro and modern titles.