

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.

$\bullet \ \ MSc\ in\ Computer\ Science\ and\ Computational\ Mathematics$

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.