Raúl Díaz García

LinkedIn: https://www.linkedin.com/in/raul-diaz-garcia/ e-mail: diaz.raul@gmail.com Homepage: https://rauldiaz.github.io/ https://github.com/rauldiaz

EDUCATION University of California, Irvine

Ph.D., Computer Science September 2011 - October 2016

Thesis: Strong Geometric Context for Scene Understanding

Universitat Autònoma de Barcelona, Spain

M.S., Computer Vision and Artificial Intelligence September 2008 - September 2009

B.S., Computer Science Engineering September 2001 - June 2007

Nottingham Trent University, UK

B.S.'s Final Year Project

February 2006 - June 2006

EXPERIENCE

Amazon Web Services - Professional Services, Spain Since March 2020 Sr Delivery Consultant - Generative AI, Machine Learning, Computer Vision, and IoT

- Leading pre-sales customer conversations and project proposals.
- Acting as a subject matter expert and technical lead during project delivery.
- Expertise delivering results across industry verticals such as Financial Services, Manufacturing, Agriculture, Media and Entertainment, Logistics, and Sports.
- Authored public blogs and code repositories regarding AWS solutions.

HP Inc, San Diego, CA

October 2016 - February 2020

Computer Vision and Machine Learning Research Lead

- Software development for 3D scanning, photogrammetry, and quality assessment.
- Research of novel computer vision and machine learning products.
- Helped creating ML/AI engineer and manager recruiting profiles for HR.

CEPL, Barcelona, Spain

May 2010 - July 2011

Project analyst

- Supervised migration from Sony's logistic system to CEPL's.
- Maintained Sony's former legacy applications.

Sony, Barcelona, Spain

August 2006 - April 2010

Chief Technology Architect

 Lead the design of database schemes and supervised a small team dedicated to implement software interfaces for Intranet development.

Business Consultant

• Evaluated and designed new business software tools across the sales division.

 $Software\ Developer$

• Designed and developed a new warehouse management software for the logistic division, on top of a legacy host environment.

Isislan IT Services, Sabadell, Spain September 2004 - January 2006 IT Engineer

• Network and Database administration of several customer companies.

AWARDS AND GRANTS

Balsells Fellowship, September 2011 - August 2013. **Erasmus** Fellowship, February 2006 - June 2006.

TEACHING

Universitat Autònoma de Barcelona

Sept 2009 - July 2011

Teacher Assistant

- Introduction to Artificial Intelligence: lead discussion lectures on introductory concepts of AI like search, heuristics, and supervised/unsupervised learning.
- Artificial Vision: taught about initial aspects of vision such as acquisition, filtering, morphological transforms, description, segmentation, and clustering.
- Introduction to algorithms and programming: lead discussion lectures about basic data structures, algorithm concepts, and software life cycles (design, coding, test).
- Databases: taught discussion sessions on relational database architecture, entity relationship models, design, and normalization.

REFEREED CONFERENCE AND WORKSHOP

PUBLICATIONS

R. Díaz, A. Marathe. Soft Labels for Ordinal Regression. In Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition (CVPR). Long Beach, California, June 2019.

- R. Díaz, C. Fowlkes. Cluster-wise Ratio Tests for Fast Camera Localization. In Workshop on Visual Odometry & Computer Vision Applications Based on Location Clues, IEEE Conference on Computer Vision and Pattern Recognition (CVPR). Honolulu, Hawaii, July 2017.
- R. Díaz, M. Lee, J. Schubert, C. Fowlkes. Lifting GIS Maps into Strong Geometric Context for Scene Understanding. In Proceedings of the IEEE Winter Conference on Applications of Computer Vision (WACV). Lake Placid, New York, 2016.
- R. Díaz*, S. Hallman*, C. Fowlkes. Detecting Dynamic Objects with Multi-View Background Subtraction. In Proceedings of the IEEE International Conference on Computer Vision (ICCV). Sydney, Australia, December 2013.
- R. Díaz*, S. Hallman*, C. Fowlkes. Multi-View Background Subtraction for Object Detection. In Scene Understanding Workshop, IEEE Conference on Computer Vision and Pattern Recognition (CVPR). Portland, Oregon, June 2013.

PATENTS

Raúl Díaz García. Categorization to related categories. U.S. Patent US11494429B2. November 8, 2022.

LANGUAGE SKILLS

Spanish and Catalan as native speaker.

English:

- TOEFL, 2011.
- Certificate in Advanced English (CAE), University of Cambridge, 2006.

TECHNICAL SKILLS

Operating Systems: Windows, Linux Languages: Python, C/C++, Matlab, Java

Data Processing: OpenCV, Numpy, Scikit-learn, Scipy, Pandas

Deep Learning: Tensorflow, Keras, Pytorch Database: MySQL, PostgreSQL, Oracle

Coding & Versioning: LATEX, Git, Subversion, Anaconda

Familiar: OpenVMS, Pascal, Ruby

CLOUD CERTS

AWS Certified Solution Architect - Associate

AWS Certified AI - Practitioner

AWS Certified Machine Learning Engineer - Associate

AWS Certified Machine Learning - Specialty

^{*} equal contribution