Pablo Martínez González



WORK/RESEARCH EXPERIENCE

UNIVERSITY OF ALICANTE

RESEARCH ENGINEER AND FACULTY

Alicante, Spain. (2018 - Ongoing) 5 years

• Full time research engineer as a consequence of my PhD grant. It includes the development of my PhD thesis and teaching hours to bachelor students, among others.

TECHNISCHE UNIVERSITÄT WIEN (TU WIEN)

VISITING SCHOLAR

Vienna, Austria. (2021) 3 months

 Proposed a deep learning model based on 6D object pose estimators for predicting suitable grasping points and areas on objects. Collaborated with the Vision for Robotics research group.

GESTIÓN TRIBUTARIA TERRITORIAL (GTT)

JUNIOR PROGRAMMER

Alicante, Spain. (2016 - 2017) 1 year

• Worked on maintaining and extending a web platform (C#) and its database architecture (SQL, PL/SQL). This platform is used by public organisms.

EDUCATION

UNIVERSITY OF ALICANTE

PhD in Deep Learning and Computer Vision

Alicante, Spain. 2018 - 2023 | FPU Grant

PhD thesis related to 6D object pose estimation with deep learning techniques, and trained with synthetic data.

B.Sc. IN COMPUTER SCIENCE

Alicante, Spain. 2011 - 2015 | 9.18/10 GPA

High Academic Performance Group

B.Sc. Thesis: Privacy and security when accessing cloud data. Specialised on data mining, computer vision, robotics and Al. Extraordinary award for best academic record.

B.Sc. IN PHYSICS

Alicante, Spain. 2018 - Ongoing

REY JUAN CARLOS UNIVERSITY

M.Sc. IN COMPUTER GRAPHICS. GAMES AND VR

Madrid, Spain. 2015 - 2017 | 8.28/10 GPA

M.Sc. Thesis: TempleOps: An online multiplayer third-person shooting game with random map generation (VG development).

UNIVERSITY OF SALFORD

ERASMUS INTENSIVE PROGRAM: BIG DATA

Manchester, UK. 2014

PUBLICATIONS

JOURNALS

- · S. Oprea et al., "A review on deep learning techniques for video prediction" PAMI, 2020.
- P. Martinez-Gonzalez et al., "UnrealROX: An eXtremely Photorealistic Virtual Reality Environment for Robotics Simulations and Synthetic Data Generation" VirtualReality, 2019.
- S. Oprea et al., "A visually realistic grasping system for object manipulation and interaction in virtual reality environments" Computer&Graphics, 2019.
- A. Garcia-Garcia et al., "A survey on deep learning techniques for image and video semantic segmentation" ASOC, 2018.
- H. Mora-Mora et al., "Computational analysis of distance operators for the iterative closest point algorithm" PloS One, 2016.

CONFERENCES

- P. Martinez-Gonzalez et al., "Synthetic contact maps to predict grasp regions on objects" IJCNN, 2022.
- P. Martinez-Gonzalez et al., "UnrealROX+: An Improved Tool for Acquiring Synthetic Data from Virtual 3D Environments" IJCNN, 2021.
- S. Oprea et al., "H-GAN: the power of GANs in your Hands" IJCNN, 2021.
- A. Garcia-Garcia et al., "The RobotriX: An eXtremely Photorealistic and Very-Large-Scale Indoor Dataset of Sequences with Robot Trajectories and Interactions" IROS, 2018.

GRANTS AND AWARDS

2018 Spanish FPU Grant for PhD Studies

2015 BSc in Computer Science extraordinary award for best academic record.

SKILLS

FOCUSED ON

Deep Learning, Computer Vision and Virtual Reality

ALSO INTERESTED IN

GPGPU programming, 3D computer graphics and Physics

TOOLS AND LIBRARIES

UE4 • Unity • PyTorch • Tensorflow • Git

Programming

Python • C and C++ • CUDA • ATEX • Java • Matlab