

Javier Rodriguez Puigvert

Website: https://jrodriguezpuigvert.github.io Email: jrp@unizar.es; javier.r.puigvert@gmail.com

Mobile: (+34) 638 450 611

Education

Present - Jan 2020 **PhD Computer Science at Robotics, Perception and Real Time Group**, *Universidad de Zaragoza*, Advisors: Prof. Javier Civera and Prof. Rubén Martinez-Cantin, Zaragoza, Spain.

Jan 2019 - Jun 2019 Deep Learning Nanodegree, Udacity.

Jul 2014 - Sept 2018 Master of Science in Computer Science and Engineering, Technische Hochschule Köln, Cologne, Germany.

Sept 2012 - Jul 2013 **Erasmus Exchange Programme: Bachelor Thesis**, *Technische Hochschule Köln*, Cologne, Germany.

Sept 2008 - Sept 2012 **Bachelor of Science in Telematic Engineering**, *Universidad de Alcala*, Madrid, Spain.

Professional Experience

Present - Jan 2020 Research Assistant- PhD Candidate, Universidad de Zaragoza, Spain.

Dec 2019 - Jun 2018 **Software Developer**, Cologne Intelligence GmbH, Germany.

Jun 2018 - Aug 2014 Student Software Developer, Cologne Intelligence GmbH, Germany.

- **InPosition System:** Design and development of an indoor positioning solution based on visual data. *Machine Learning, Computer Vision.*
- InPlaces SDK: Design and development of InPlaces Android SDK that permits navigation using augmented reality. Augmented Reality, Computer Vision, Android.
 [video]

Sept 2013 - Aug 2014 Student Software Developer, Grandcentrix GmbH, Germany.

Jan 2012 - Sep 2012 Internship as Electronic Engineer, Abengoa, Spain.

Publications

Uncertain Depths: Single-View Predictive Depth and Uncertainty in Endoscopies Under Submission 2021.

Bayesian Deep Networks for Supervised Single-View Depth Learning. Under submission 2021. [pdf][video]

Localization Service Using Sparse Visual Information Based on Recent Augmented Reality Platforms.

ISMAR (In Adjunct Proceedings of the IEEE International Symposium for Mixed and Augmented Reality 2018) Munich, 2018. [pdf][video]

Obstacle Collision Avoidance System for visually impaired based on Tango. Technische Hochschule Köln Cologne, 2018. [pdf]

Robot as a complex actuator in Sensor Cloud controlled through cloud by an Android application. Technische Hochschule Köln, Cologne, 2013.

Talks

Localization Service Using Sparse Visual Information Based on Recent Augmented Reality Platforms. 8th GeolT Wherecamp Conference 2018. TU Berlin, Germany.

Tango Step by Step: Indoor Positioning and Navigation. Digility Conference and Expo 2017. Cologne, Germany.[video1][video2]

Indoor Navigation with Google Tango. Droidcon UK 2016. London, United Kingdom. [video]

Technical Skills

Programming Languages Python, C/C++, Kotlin and Java.

Infrastructure / Cloud Amazon Web Services, Amazon SageMaker, Docker.

SW Methodologies DevOps, Continuous Integration, Continuous Delivery, Test Driven Design,

Clean Code.

Developments Tools IntelliJ IDEA(Android Studio, PyCharm), Git, Atlassian Tools (Bitbucket, Jira,

Bamboo).

Methodologies Agile software development (Scrum, Kanban), Waterfall.

ML Frameworks **PyTorch**, **OpenCV**.

Android ARCore, Rx Frameworks, Espresso, Retrofit, Android NDK.

Interests

2012 - 2016 Member of Eurobotics Engineering Team, ARC and IEEE branch of the University

of Alcalá, [web].

5-8th place Eurobot Europe Robotic Contest (2015 Yverdon-les-bains, Switzerland) 1st place Eurobot National Robotic Contest (2015 Madrid, Spain) (2015 Aachen, Germany)

(2014 Madrid, Spain)

Additional Education

2015 Introduction to Big Data with Apache Spark, BerkeleyX.

2014 Foundations of Computer Graphics, BerkeleyX.

2014 Databases, Technische Hochschule Köln.

2014 **Software Engineering**, Technische Hochschule Köln.

2013 Embedded Technologies and Architectures in Satellites, Universidad de Alcalá.

Languages

Spanish Native Speaker

Catalan Near Native

German Full professional proficiency DSH 2 (C2-C1)

English Full professional proficiency