Adrià Arbués Sangüesa

http://es.linkedin.com/in/adriaarbues
28/12/1993 | arbues6@gmail.com | (0034)619.040.226 | Barcelona, Spain

TEDxTalk

EDUCATION

POMPEU FABRA UNIVERSITY
PhD Fellow
From October 2017 | Barcelona, Spain
Computer Vision and Machine Learning Techniques applied to Basketball Video Sequences.

AALBORG UNIVERSITY
MSc in Vision, Graphics and Interactive Systems
September 2015 - June 2017 | Aalborg, Denmark

POMPEU FABRA UNIVERSITY
BEng in Audiovisuals Systems Engineering
September 2011 - July 2015 | Barcelona, Spain

COURSEWORK

RELATED COURSES
• Advanced Image and Video Processing
• Machine Learning
• Computer Graphics Programming
• User-Experience Design
• Three Dimensional Vision
• Video and Images Encoding Systems
Distinctions:
• Image Analysis and Interpretation
• Advanced Visualization

SKILLS

PROGRAMMING
Mastered:
Python • Matlab • PyTorch • FFmpeg Tensorflow • Keras • C++ • LaTeX
Familiar:
R • PHP • Qt • Visual Basic • C# Java • MySQL • C

LANGUAGES
Mother tongues:
Catalan, Spanish.
Foreign languages:
English (Cambridge Certificate in Advanced English), basic Danish.

STRENGTHS
Leadership, Work Ethic, Team Work, Organization and Time Management, Communicative and Social Skills.

References available on request

EXPERIENCE

F.C. BARCELONA LASSA | Lead Data Analyst
July 2017 – October 2017 | Barcelona, Spain
Gathered a novel basketball database and trained a Machine Learning model from scratch to assess the hiring process by predicting player's performance (statistics after acquisition).

1D3A (ERIC SPORTS) | Computer Vision Intern
September 2016 – January 2017 | Barcelona, Spain
Implemented a new way to generate fast and robust sport video reports using FFmpeg and C#; provided technological solutions to the Rafa Nadal Academy (video automation).

AALBORG UNIVERSITY | Study Job, PhD Assistance at VAP Lab
March 2016 – September 2016 | Aalborg, Denmark
Segmentation and generation of training data, containing either traffic sequences or chicken entrails. Posterior evaluation and comparison of Computer Vision techniques on labelled data.

NEUROELECTRICS | Software Developer Intern
June 2014 – October 2014 | Barcelona, Spain
Designed an automatic algorithm to check the performance of electroencephalogram tests; recognized movement patterns from accelerometer data of neuro-helmets.

EXTRA-CURRICULAR EXPERIENCE

MAGMA, ASSOCIATION TO PROMOTE YOUTH RESEARCH | Science Dissemination, different positions in the Board of directiors
General Coordinator | October 2016-October 2018
President | October 2014 - October 2016: Responsible of negotiating new affiliations with other science associations, writing agreements and coordinating trips.
Exporecerca Jove Fair Director | April 2013 - October 2014. Led a team of 60 people to perform the biggest science fair in Spain. Used social skills to appear in national media.

BASKETBALL COACH AND JOURNALIST From 2009 | Spain
Wrote articles in three sports media (i.e. **Solobasket**). Assistant coach of **F.C. Barcelona** u15 team, obtaining leadership and communication skills, plus teamwork.

PROJECTS AND PUBLICATIONS

Single-Camera Basketball Tracker through Pose and Semantic Feature Fusion
Published in the International Conference of Artificial Intelligence on Sports July 2019 | Paris

Multi-Person Tracking by Multi-Scale Detection in Basketball Scenarios
Published in the Irish Machine Vision and Image Processing Conference August 2019 | Dublin

Identifying Basketball Plays from Sensor Data; towards a Low-Cost Automatic Extraction of Advanced Statistics
Published in the IEEE International Conference on Data Mining Series (DAPS Workshop) - November 2017 | New Orleans, United States of America

Initiating GrabCut by Color Difference for Automatic Foreground Extraction of Passport Imagery
Published in the Sixth IEEE International Conference on Image Processing Theory, Tools and Applications - December 2016 | Oulu, Finland

Tracking of a basketball ball: towards an automatic detection of infractions
Bachelor Thesis: awarded with 3 national prices. Participated in Expo-Sciences Europe 2016 - July 2015 | Toulouse, France

Digitalization of a basketball coach board
High School Final Project: awarded with 3 national prices. Participated in Intel ISEF - May 2012 | Pittsburgh, United States of America