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| Plaza Juan XXIII Nº5 8ºB Alcalá de Henares, Madrid 28804, Spain.  +34 601 391 502  [**juancasado@mrblissfulgrin.com**](mailto:juancasado@mrblissfulgrin.com) | Juan Casado  Ballesteros | | | | <http://www.mrblissfulgrin.com>  <https://github.com/JuanCasado>  <https://www.linkedin.com/in/juancasadoballesteros/> |
| **Employment** | |  | |  | | |
| **Full stack robot developer** | | **Complubot** | | **Spring 2017 - Today** | | |
| Pollotron-Project (Under development) | | | Summer 2018 - Today | | | |

* C++ Linux/ROS based robot that that performs SLAM to navigate through the environment.
* Custom designed motor controller based on ATmega2560.
* Image recognition with Intel Real Sense and OpenCV.
* Multi-platform desktop C++ app to monitor and control the omnidirectional velocity-encoded motor platform.

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| MegaTrueTrue | Spring 2017 – Summer 2018 |

* C++ Arduino based robot that imitates the behavior of TrueTrue robot while being eight times bigger.
* Low level sound made by generating a sinusoidal wave with processor interruptions and a R-2R ladder.
* Multi-platform mobile and desktop C++ app to remotely control the robot over TCP.
  + This robot debuted on SIMO robotics fair on November 2018 at Madrid.

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| **Software engineer** | **Complubot** | | **Fall 2015 – Spring 2017** |
| ColdPlay-Robot | | Fall 2016 – Spring 2017 | |

* C++ Arduino based robot that uses a Pixy camera to perform artificial vision over real time video.
* The robot detects objects by color and classify them under color matching compartments.

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| Alien Soccer | Fall 2015 – Fall 2016 |

* C++ Arduino based distributed robot system communicated by Bluetooth.
* Two robots cooperate one with the other to play soccer with the Spanish Robocup 2015 Junior rules.
* Each robot had a modular architecture with dedicated software and hardware to control each sensor including a compass and a 360 infrared vision system and each encoded motor.
  + This robot was the third out of eight in at Imperdibles2.0, a European robot soccer competition.

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| **Education** |  |  |
| **Alcalá de Henares, Madrid** | **Univesity of Alcalá de Henares** | **September 2016 - Today** |

* Computer Science degree. 158/240 credits completed, all I signed in for, with a GPA of 3.1/4 (7.75/10).
* Coursework: Statistics, Linear algebra, Calculus, Logic, Algorithmic, Data structures, Operative systems, Data bases, Concurrent programming, Robotics, Functional programming, Software engineering, Physics, Distributed programming, Network management, Artificial Intelligence, Compilers.

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| **Alcalá de Henares, Madrid** | **Brithis Council** | **September 2017 -** **Today** |

* TOEFL 110-114 Cambridge CAE C1.2 level English classes. (2018 - Today)
* TOEFL 94-101 Cambridge CAE C1.1 level English classes. (2017 - 2018 )

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| **Technical experience** |  |  |

* Multi-threaded memory shared simulation of a fuel station done in JAVA. It could be remotely monitor through TCP connection over another JAVA application.
* Color Queue: iOS and Android app in C++, one user creates a TCP server to allow others connect and play together.
* Shape animator done in python with pygame, it uses a complex OOP hierarchy to determine the animations applicable to each of the shapes.
* JAVA program that translates JSON to .dot files and them to .svg using a Parser and a Lexer built with antlr4.
* Creation and maintenance of a PostgreSQL data base.
* Game of life: iOS and Android app done with cocos2d-x game engine that simulates Conway’s Game of Life.
* Set of common algorithms in Swift (greedy/simple recursion/backtracking/dynamic).
* Shutter Earth 2d platform shooter in JAVA over slik2d game engine.
* Creation of a Linux shell that used POSIX calls to Linux and implemented a custom pipe and redirection system.

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| **Programming Languages and Technologies** |  |

* C++, C, JAVA, python, Swift, R, Haskell, Prolog, SQL, XML, JSON Markdown.
* ROS, cocos2d-x, pygame, slick2d, Swing, antlr4, OpenCV TensorFlow.
* PostgreSQL, MySQL, Linux, Git, GitHub, JIRA, WordPress.
* NetBeans, XCode, CLion, PyCharm, Sublime Text, Visual Code, Atom, Code Blocks, Android Studio, KiCad.