

Gabriel F P Araujo

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📄 github.com/Gastd

Education

Undergraduate **B.E. in Mechatronics Engineering**, *University of Brasilia, Brasilia, Brazil.*

Experience

- February 2013 – **Software Developer**, *LIPIS/LEI (Laboratory of Instrumentation and Processing of Images and Signals)*, University of Brasilia, Brasilia, Brazil.
- February 2014
 - Implementation of an autonomous Antibiotic sensitivity testing algorithm previously designed by LIPIS researchers.
 - Technologies: OpenCV and C++.
- July 2014 – **Undergraduate Researcher**, *CIC UnB (Computer Science Department)*, University of Brasilia, Brasilia, Brazil.
- June 2015
 - Development of an autonomous driver to the TORCS simulator in order to compete in the Simulated Car Racing Championship, a former GECCO Competition.
 - 5th place in the SCRC 2015.
 - Paper describing the pilot development, DOI: 10.1109/SBGames.2015.19
- September 2016 **Teacher**, *University of Brasilia*, Brasilia, Brazil.
- 2016
 - Main teacher at workshop in ROS.
 - Knowledge network: Robotics, Python, and ROS.
- January 2017 **Teacher Assistant – Computational Fundamentals of Robotics**, *University of Brasilia*, Brasilia, Brazil.
- February 2017
 - Elaborate challenges and assignments under the Professor's supervision for Computational Fundamentals of Robotics course during UnB Summer School and further documentation of the achieved goals.
- May 30, 2017 **Software Developer – Google Summer of Code 2017 participant with GNSS-SDR**, *University of Brasilia*, Brasilia, Brazil.
- August 21, 2017
 - Expansion of the GNSS-SDR software to GLONASS system.
 - Implementation of both Acquisition and Tracking blocks of the GLONASS to GNSS-SDR.
 - Further details: <https://gist.github.com/Gastd/f46a2bd78dcc11984e69eb7cbc49f8a4>
- April 13, 2019 **Intern**, *LandSense Soluções Tecnológicas*, Brasilia, Brazil.
- June 21, 2019
 - Embedded software development.
 - Design and implementation of a Bluetooth mesh protocol.
 - Main technology: C/C++.
- August 2013 – **Undergraduate Researcher**, *LARA (Automation and Robotics Laboratory)*, University of Brasilia, Brasilia, Brazil.
- Present
 - SDR development for mobile robots localization using multi-constellation GNSS systems.
 - Development of a "chat-bot" system for controlling a mobile robot using speech recognition.
 - Build an indoor localization system using EKF and ARToolKit tags.
 - Implementation of ROS drivers for GPS and IMU sensors.

Computer skills

Languages C/C++, Python

Frameworks Robot Operating System (ROS), GoogleTest, CMake

Debugging GDB, Valgrind

Applications MatLab, L^AT_EX, SolidWorks, MS Office, Eagle