

Gabriel F P Araujo

Brasilia, Brazil
☎ 55 61 982 308 980
✉ gabriel.fp.araujo@gmail.com
📄 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.
 - The solution uses 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.
 - Confection of a paper describing the pilot development, DOI: 10.1109/SBGames.2015.19
- September 2016 **Teacher**, *University of Brasilia*, University of Brasilia, Brasilia, Brazil.
- Main teacher at ROSJoy Course.
 - Knowledge network: Robotics, Python, and ROS.
- January 2017 – **Teacher Assistant – Computational Fundamentals of Robotics**, *University of Brasilia*, University of Brasilia, Brasilia, Brazil.
- February 2017
- Elaborate challenges and assignments.
 - Documentation of the achieved goals.
- May 30, 2017 – **Software Developer – Google Summer of Code 2017 participant with GNSS-SDR**, *University of Brasilia*, 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.
 - Creation of a "chat-bot" system for controlling a mobile robot using speech recognition.
 - Implementation of an indoor localization system using EKF and ARToolKit tags.
 - Program 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/Octave, L^AT_EX, MS Office, Eagle

