

Gabriel F P Araujo

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📁 github.com/Gastd

Education

Undergraduated **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 Antibioqram algorithm developed by LIPIS researchers.
 - Solution use 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.
 - Publish article about 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.
- 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
 - Expand the GNSS-SDR software to GLONASS system.
 - Implementation of Acquisition and Tracking blocks of the GLONASS version of GNSS-SDR.
 - My contribution: <https://gist.github.com/Gastd/f46a2bd78dcc11984e69eb7cbc49f8a4>
- April 13, 2019 – **Intern**, *LandSense Soluções Tecnológicas*, Brasilia, Brazil.
- June 21, 2019
 - Embedded software development.
 - Desing and implementation of a BLE Mesh protocol.
 - Project programmed in C/C++.
- August 2013 – **Undergraduate Researcher**, *LARA (Automation and Robotics Laboratory)*, University of Brasilia, Brasilia, Brazil.
- Present
 - Currently working with SDR development, software-defined radio for mobile robots localization using multi-constellation GNSS systems.
 - Implemented a "chatbot" system for control a mobile robot using speech recognition.
 - Implemented an indoor localization system using EKF and ARToolKit tags.
 - Implemented ROS drivers for GPS and IMU sensors.

Skills

- Programming Languages C/C++, Python
- Frameworks Robot Operating System (ROS), GoogleTest, CMake
- Libraries Matplotlib, OpenCV, OpenGL
- Debugging GDB, Valgrind