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 – February 2014 **Software Developer**, *LIPIS/LEI (Laboratory of Instrumentation and Processing of Images and Signals)*, University of Brasilia, Brasilia, Brazil.
- Implementation of an autonomous Antibiotic sensitivity testing.
- Algorithm previously designed by LIPIS researchers.
- Solution uses OpenCV and C++.

July 2014 – June 2015 **Undergraduate Researcher**, *CIC UnB (Computer Science Department)*, University of Brasilia, Brasilia, Brazil.
- 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.

May 30, 2017 – August 21, 2017 **Software Developer – Google Summer of Code 2017 participant with GNSS-SDR**, *University of Brasilia*, University of Brasilia, Brasilia, Brazil.
- 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 – June 21, 2019 **Intern**, *LandSense Soluções Tecnológicas*, Brasilia, Brazil.
- Embedded software development.
- Design and implementation of a Bluetooth mesh protocol.
- Main technology: C/C++.

August 2013 – Present **Undergraduate Researcher**, *LARA (Automation and Robotics Laboratory)*, University of Brasilia, Brasilia, Brazil.
- SDR development for mobile robots localization using multi-constellation GNSS systems.
- Implementation of a "chatbot" system for controlling a mobile robot using speech recognition.
- Implementation of 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/Octave, LaTeX, MS Office, Eagle