

Francisco de Souza Júnior

chico@chico.codes • chico.codes

ABOUT ME

I'm a computer scientist passionate about computers and science. I have 7+ years of experience in software development and a master's degree at the University of São Paulo. I think of myself as a generalist software developer that becomes a specialist depending on my employer's needs. I'm open to working with different software stacks.

I am currently looking to work with great people as a senior/lead software developer in high-tech projects.

WORK EXPERIENCE

Skills and Interests

C • C++ • Qt
Java • Python
Subversion • Git

Linux • Windows
Embedded Systems • IoT
Machine Learning • Computer Vision

xmrobots.com
Brazil
Jul 2012 - Jan 2020

Software Development Lead

I acted in the R&D department and was responsible for the all software stack of the drones developed by the company.

I was the software developer lead (Java, C and C++) of the first Brazilian certified drone by ANAC, The Arator 5B (chico.codes/work/arator-5b);

I coordinated a Control Station project for long-endurance drones in partnership with the FAPESP (chico.codes/work/pipe);

I worked on several peripheral products of the company, such as the RTK Base XBase (C++), the XMx Camera (Java for Android) or Web Services (Python and Flask);

I have developed with C and C++ software that meets real-time requirements for drones operation, on embedded Linux and Windows platforms.

chico.codes

Personal Projects

I develop some personal projects which I also use to improve my knowledge. One of the most relevant is the Toe Walking Detector, a software/hardware platform (Python, Keras, and PyQt) that uses a ConvNet to detect when an individual is toe walking instead of regular heel-to-toe walking (chico.codes/work/twd).

Other interesting projects, such as my IoT coffee grinder (C++ and Kotlin for Android) or my IoT table lamp (C++, Python and Java for Android), can be found on my website.

EDUCATION

São Paulo University
Brazil
Feb 2011 - Jul 2012
(dropped)

PhD in Computer Science

Autonomous Vehicles • Mobile Robotics Laboratory

I researched the detection and tracking of vehicles through LIDAR sensors and video cameras. I developed algorithms for these purposes using machine learning and computer vision. In July 2012, I dropped the doctorate due to family reasons.

São Paulo University
Brazil
Feb 2008 - Feb 2011

MSc in Computer Science

Embedded Systems • Reconfigurable Computing Laboratory

I developed in VHDL a hardware architecture based on the data flow paradigm to be executed in FPGAs.

Barão de Mauá
University Center
Brazil
Feb 2004 - Dec 2007

BS in Computer Science

Average Grade: 9.03

In my final paper, I developed a framework to create remote displays for embedded systems with Python, GTK+ and C.