Francisco de Souza Júnior

chico@chico.codes • chico.codes

ABOUT

Since beginning my career as a software developer nearly ten years ago, I've been collaborating with talented people to create incredible products. My work experience includes embedded software, machine learning, and back-end development. With such diverse experience, I consider myself a generalist software developer that becomes a specialist depending on my employer's needs. I also like to use this experience to create some odd maker projects.

EXPERIENCE

Skills and Interests

Python • Django • Flask PySpark • C • C++

Back-end • IoT Machine Learning

oowlish.com working to petco.com Remote

May 2021 - Present

luizalabs.com Brazil/Remote Apr 2020 - May 2021

Senior Back-end Python Developer • Python 3, Django, and PostgreSQL

Working full time for Petco, I'm assigned to VetPoint project. VetPoint is a scheduling system that uses reverse auctions to fill dark days on Vetco clinics and hospitals.

Senior Back-end Python Developer • Python 3, PySpark, Flask, and MongoDB

As a member of Reputation's Squad, we developed solutions to calculate the reputation score of Magalu Marketplace sellers. Here, I developed ETLs with PySpark to manage a large amount of data and restful APIs with Flask.

xmobots.com Brazil

Software Development Lead

In the R&D department, I was responsible for the all software stack of the company's drones:

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.

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Personal Projects

I like to develop personal projects to improve my knowledge. One of the most relevant is Toe Walking Detector, a software/hardware platform (Python, Keras, and PyQt) that uses an IMU Sensor and a ConvNet to detect when a person 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

PhD in Computer Science • Autonomous Vehicles

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

São Paulo University Brazil

MSc in Computer Science • Embedded Systems

I developed in VHDL a hardware architecture based on the Dataflow paradigm for FPGAs.

Feb 2008 - Feb 2011

Barão de Mauá

BS in Computer Science

Brazil Feb 2004 - Dec 2007

Average Grade: 9.0