Ignacio Bricchi
(Italy/Argentina/US Resident)
ignacio.bricchi@gmail.com
+44 7437 600 528
London UK

Twenty years. Seven countries (Argentina, Switzerland, USA, Germany, Mexico, Belgium, UK).
Numerous Passions (computer science, electronic engineering, physics, technology, science, math).
Learning at Imperial College and looking to make an impact through open source contribution to the world.

SKILLS

Languages: English (fluent), Spanish (fluent), French (proficient), Italian (Just started learning)

Proficient Programming Languages: C++, C#, Python, MATLAB, Processing, HTML, CSS, JavaScript

Known Technologies: Arduino, CPU design, Compilers, Unity, Web development

EDUCATION

Imperial College London (University) 2019-present

Electronic and Information Engineering integrated masters

Second-year student, on track to receiving a First

In first-year, received a First in all modules, distinction by Deans Award (top 10% of class), and best final term project award.

St Johns International School (High School) 2015-2019

Honors high school diploma

IB bilingual diploma: 40/45 points: with top mark 7/7 in Math, Physics, and Chemistry.

AP Math and Physics: 5/5 points in each.

SAT Math and Physics: 800/800 points in each.

WORK EXPERIENCE (linkedin.com)

Junior Engineer Summer 2018

OESIA (Technology and innovation)

Data engineering, and project management.

Working with different departments to automate a process for identifying employees who fit into a category of “innovation worker” as defined by the Spanish government, a category of employee warranting OESIA, social security tax cuts.

The system tracks employees previously identified, keeps track of they’re projects and co-workers, and tries identifying other employees which are likely to be “innovation workers”. From here it provides a simple interface for the appropriate manager to manually check the information gathered and decide if the employee fits this scheme or not.

When approved another automated system takes care of sending emails to collect and store data in case of auditing.

Developing was in Visual Basic with excel to work with existing infrastructure in the company.

Junior Software Engineer Summer 2017

BORRO (Luxury asset loaning)

Blockchain financial ledger.

I ran a small scale experiment where I developed and deployed a blockchain-based financial ledger to keep track of the large sums of money passing through the company on the daily.

The blockchain-based ledger is immutable and adds a layer of trust to the company which deals with very large sums of money and high-value assists. This was also during a boom where blockchain was being added to everything.

At the end of the experiment, my evaluation showed that the project wouldn’t add enough value to the business to justify the change.

Development was made using Java and a blockchain backend system called Multichain to manage the data. Then PHP and JavaScript were used to develop the web server hosting a user interface for the ledger.

OWN DEVELOPMENT

Notable projects with descriptions and live demos where available can be found at (ibricchi.com)

All code for all projects can be found at (github.com)

Transient circuit simulator (C++, WebAssembly, Teamwork) (github.com) (ibricchi.com)

This was my submission for my University first-year final group project. This received recognition as the best final first-year project.

The simulator supports linear and non-linear components, supports a standard API to implement new components when necessary. The solution is based on an industry-standard SPICE input format for circuits.

On top of that, a simple Web Assembly based user interface was made and can be found hosted on my portfolio website.

iberiajs HTML pre-processor (JavaScript) (github.com) (ibricchi.com)

This is a personal project that spun out of the development of my project portfolio website.

This processor runs completely on the front end and supports both my Iberia template design, as-well-as support for markdown baked in.

When I started development, I was researching programming language design, because of this, the scanning and parsing technology is very similar to what is found in modern compilers.

The project is still under development. My portfolio website is an example of a website built on top of this technology.

iglu Programming language (C++) (github.com) (ibricchi.com)

Object-oriented interpreted programming language built on C++.

This project was created to learn more about the fundamentals of programming, and how languages might work at low levels. I have learned a lot from the project and am still developing it.

The language is still in its infancy, but can already be used for basic data manipulation, and is designed in a way which makes expanding the language with c++ classes accessible through the iglu interface simple.

Founder and leader of a high school educational programming club.

In high school, I led a programming club where I spent an hour a week teaching people how to start-up programming.

I taught HTML/CSS/JS one year and Processing in another year. Besides the code, I tried spending more time teaching people how to problem solve, as well as learn how to formulate their questions to be able to make the most out of online resources.

The club to the last of my knowledge was still running and was taken over by one of my students who had never programmed before coming to the club.

OTHER INTERESTS

Hobbies: Rubik's cubes aficionado

Sports: Taekwondo black belt, Swimming, high school football and track and field captain

Music Instruments: Piano, Bass Guitar, high school orchestra