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PERSONAL DATA

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EDUCATION

University of Salamanca

Program name: Ingeniería Informática (Computer Science)

Expected graduation: June 2017

GPA: Total: 3.136

 $2^{nd} \text{ year}^1: 3.516$

Achievements: I have earned distinctions in the following subjects:

• Programming I

• Operating Systems I and II

• Theoretical Computer Science

• Algorithms and Data Structures II

• Database systems

Extracurricular experience

Student representative I've been my class' representative during these two years of college, and member of the

student group during the last one.

VALS SoC I worked with Mozilla during the academic year of 2015 in terms of the VALS Semester

of Code², implementing the WebGL API for the Servo³ project written in Rust.

I currently maintain the WebGL implementation (commits⁴), including an offscreen

graphic context management library⁵.

BISITE RESEARCH I volunteered to help the BISITE Research Group here in Salamanca during August of

2015. I did some work collaborating with the OIT⁶ with some serial device which is

still currently unnamed.

Part of that work is on GitLab⁷.

¹Actually my first year was weaker because of familiar issues (and a bit of lazyness)

²http://semesterofcode.com/

³https://github.com/servo/servo

⁴https://github.com/servo/servo/commits?author=ecoal95

 $^{^5}$ https://github.com/ecoal95/rust-offscreen-rendering-context

⁶Osaka Institute of Technology, Japan

⁷https://gitlab.com/eca/rs232c-basic-example

Programming languages

I'm proficient in the following languages (not ordered):

- C
- C++ (modulo high complexity template-metaprogramming, yet)
- Rust
- Javascript (modulo ES6, yet)
- Ruby
- PHP
- Java
- Bash

I also know enough Python to develop complex applications (but I'm definitely not proficient), and a bit of x32 assembly.

SOFTWARE ENGINEERING SKILLS

- Fast learning
- Code readability
- Test Driven Development
- Application Architecture
- Problem solving
- Algorithms and Data Structures

Areas of knowledge

I'm not proficient in all of these, but these are some areas in which I'm sure I could start working right now and be performant.

- General systems programming
- Parallel systems development
- Operating Systems
- Sockets and networking
- Lexing and parsing
- Low level graphics programming
- Browser rendering engine
- Web Development
- Web Design
- REST APIs
- Cloud computing
- Unix system administration
- Database administration

Note that I'm more than open to learn new things outside of this list.

Languages

Spanish: Native Proficiency (ILR scale)

English: Professional working proficiency (ILR scale).

OPEN SOURCE AND SYSTEMS PROGRAMMING

I love to make my code open source, as well as collaborating with open source projects. I've learned, and still learn a lot from public repositories, so I think that if I can help someone to learn something, I must do it. Furthermore, it potentially makes you a better programmer, since more people are able to review the code and suggest changes.

My most popular open source project so far has been ec-stars-rating⁸, a WordPress plugin I wrote some years ago⁹ that has about 10K downloads, but I have a whole codebase in my GitHub profile¹⁰, with contributions to various projects.

 $^{^{8}}$ https://wordpress.org/plugins/ec-stars-rating

⁹Yes, PHP will follow me to the grave... (sigh)

 $^{^{10} {}m https://github.com/ecoal95/repositories}$

Systems Programming

When I started college, I had my very first contact with systems programming. After the first few Aha! moments, I fell in love.

I encourage you to to take a look at my last year's schoolwork¹¹, which is mostly in \mathbb{C} . Some in there are not assignments but for fun, like a signal-based semaphore¹²).

You can also scan some C++ side¹³ projects¹⁴, apart from the **Rust** code I write for Mozilla's Servo project¹⁵, and my Firefox contributions¹⁶.

Professional experience

I've been developing web applications professionally for some years now. It all started as a hobby way before I started college, but now it pays my tuition and my internet connection.

I've worked (and still work in my free time) for:

Innovega is a small web development company, serving good clients like groopify¹⁷ using a modern software stack.

My role in the team during the three months I could work straight with them in the office (summer of 2014) was working side by side with the other two founders as a **senior developer**, and also **pairing** with the junior people in order to teach them.

Before and after that I work in my free time in lower priority projects (and helping them out in higher priority one as demanded).

DonCupones Internet S.L.:

 ${\it DonCupones}^{18}$ is a growing company initially based in Badajoz, and now in Madrid. It works in the sector of affiliate marketing.

As the only developer for the company since 2013 (apart from the designer of the site), I've been responsible for developing the whole web back-end integrating it with the designed front-end, and making sure it was scalable.

The main system is developed in PHP^{19} with a custom MVC famework that has scaled surprisingly well, and made possible to replicate the page in almost-zero time as white²⁰ labels²¹.

I'm also responsible for others Rails-backed internal business applications, but that's way less fun. I can play with modern parts of the web API though.

OTHER CLIENTS:

I used to work as a freelance developer, but now I have to be more careful due to my time constraints.

¹¹https://github.com/ecoal95/gii-2

 $^{^{12}{}m https://github.com/ecoal95/gii-2/tree/master/ssooii/custom_semaphore}$

 $^{^{13} {\}rm https://github.com/ecoal95/http-server}$

¹⁴https://gitlab.com/eca/rs232c-basic-example

 $^{^{15} \}mathtt{https://github.com/servo/servo/commits?author=ecoal95}$

¹⁶ https://bugzilla.mozilla.org/buglist.cgi?emailtype1=exact&emailassigned_to1=1&email1=ecoal95%40gmail.com

¹⁷https://www.groopify.me

¹⁸http://www.doncupones.com

 $^{^{19}}$ It's something I regret now, but when I initially built it in 2013 I didn't know other technologies

²⁰http://descuentos.libertaddigital.com

²¹http://cupones-descuento.rastreator.com