# Salvador Corts Sánchez

# Computer Science Student and Software Engineer

I am good at problem solving and team working. I am proficient in Linux use and administration, It has been my main operating system since I was 12 years old. I always have security, performance, scalability and automation in mind when I work, following the Twelve-Factor App Methodology.

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github.com/salvacorts

# **EDUCATION**

# **B.S. Computer Science**

The University of British Columbia

Vancouver, Canada Two terms exchange student. Distributed systems and Project Managment courses.

**B.E. Computer Engineering** 

09/2015 - 09/2019 Granada, Spain

10/2019 - Present

09/2018 - 04/2019

University of Granada &

Specialization in Soft Computing and Intelligent Systems.

# WORK EXPERIENCE

# Real-Time Innovations (RTI)

RTI is the Industrial Internet of Things (IIoT) connectivity company. RTI Connext Databus is a framework that shares information in real time, making applications work together as one, integrated system.

Across industries and across the world, companies rely on Connext DDS to connect their mission-critical industrial systems. Such as NASA, Lockheed Martin, Rytheon, Audi, Hyperloop and General Atomics among many others.

# Software Engineer I

Granada, Spain Micro Team

- Working on Connext DDS Micro and Cert: implementations of the OMG DDS standard for resource-constrained devices certified for avionics and military systems.
- Implementing CRC support for Connext DDS Micro.
- Working on ISO-26262 certification for road vehicles, and DO-178C certification for avionics.
- Two months as support engineer solving problems in complex scenarios encountered by our customers in fields such as autonomous vehicles or defense among others.
- Feature and unit testing of distributed systems across different Operative Systems and Architectures such as FreeRTOS, VxWorks, Linux, Windows, and QNX.

# Software Engineer Intern

05/2019 - 09/2019 Granada, Spain Performance Team

- FlatData and Zero Copy support for RTI Perftest, a command-line application that measures the Latency and Throughput of very configurable scenarios.
- Tool to benchmark different serialization solutions against different data types.
- Found and fixed performance degradation bug in critical path of Connext DDS Pro. Mentor: Javier Morales - jmorales@rti.com

#### **DL Consultores**

#### Software Developer Intern

07/2017 - 08/2017 Buenos Aires, Argentina

Research and Development Team

- Server back-end development to manage a client support chat.
- Intelligent Assistant development and training to assists clients searching for legal and financial documents.
- Web penetration testing on a under-development project.

Recomendation Letter

# Skills

C/C++, Python, Golang



Java, Bash, SQL, Docker

Machine Learning, Linux

Google Cloud, Travis CI, C#

Algorithms, Data Structures

Distributed Systems, Networking



# **ORGANIZATIONS**

HighSec Blog Z 2014 - 2015

Writer

Blog about cyber security

Hack & Beers ☑ 2017 - 2018

Organizer

Talks about cyber security

VegaJam 2019 - Now

Organizer

Videogame development competition

## **LANGUAGES**

#### English

Flull Professional Proficiency

### Spanish

Native Proficiency

# **PROJECTS**

#### Gocey. Distributed Evolutionary Algorithms on Ephemeral Infrastructure ☑

Golang, Protocol Buffers, gRPC, Docker, Prometheus, WASM, Distributed Systems, Machine Learning

Bachelor Thesis. A Go library to run decentralized evolutionary algorithms powered by a peer-to-peer collaborative science network. The demostration problem was optimization of neural networks for cancer detection.

Web client written in Javascript and Web Assembly. Native client written in Golang.

Heavily unit-tested and developed with scrum.

Supervisor: J.J. Merelo - jmerelo@ugr.es

#### 

Angular, Golang, Google Cloud, Kubernetes, Travis Cl

Website to retrieve customer reviews for products, extracting key features and sentiments about them.

#### QAP Metaheuristics Collection &

C++, CMake, Metaheuristics

A collection of different metaheuristics to solve QAP problems. Including Genetic algorithms, Memetic Algorithms, GRASP and Simulated Annealing among others.

#### Distributed Hash Table 2

Java, Maven, Distributed Systems, Epidemic Protocols

Implementation of a Distributed Hash Table, like Amazon's Dynamo DB, to store a map of key value pairs on a peer-to-peer system.

#### Interactive MNIST Paint

Python, Keras

GUI to draw numbers and recognize them with a neural network trained using Keras and the MNIST dataset.

#### Smashcrack 2

Python, Cryptography, HTML, CSS, SQL

A web page to encrypt text, identify common encryption algorithms and attemp to crack encrypted text.

#### Password Cracking Suite 2

Python, Cryptography

CLI tool to crack encryted text with bruteforce or by using dictionaries.

# Hulio Wars 🗷

Game Development, Godot Engine

A small videogame developed in 48 intense hours for the MalagaJam VIII. A 2D videogame where you have to slay as many enemies as you can before you change team or die.

I was in charge of developing the AI of the enemies.

#### Zurbi & Whisckey 2

Game Development, Unity Engine, C#

3D Videogame for the MalagaJam IX. Collaborate with your rival while cleaning the beach by throwing the garbage to a Garbage truck or try to mess with your opponent's game plan by throwing rubbish to their side of the shore.

If the players collaborate they can both achieve the victory, but if you throw all the garbage to your opponent you can have a victory all for yourself.

#### Jojoai 🗗

Game Development, Unity Engine, C#

Online Videogame for the VegaJam I developed in 48 hours. Players have to make as much damage as they can in order to become the next god, which will be able to slay other players with just one shot.

I was in charge of implementing the online mode where players can controll their character with their phones.

I was also one of the event orginizers.

# **INTERESTS**

# **Hobbies**

