## Alvaro Joaquín **GAONA**

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Rivadavia Av. 5560 3B, CABA, Argentina

i October, 1st. 1991 (28 years) at Buenos Aires, Argentina

## **Electronics Engineer**



#### Education

**2018-2020** Favoloro University - Master in Biomedical Engineering

2010-2019 University of Buenos Aires - Electronics Engineering Bs. degree - GPA: 3.5

2004-2009 Social Military Institute Dr. Dámaso Centeno - Secondary School Degree with option in Mathematics

and Natural Sciences

2008 Cambridge - First Certificate in English.



#### > Software Engineering:

Main programming experience in C/C++, Java, Python.

Familiar with Go, JavaScript, TypeScript and Ruby.

Database design and modeling. Experience with PostgreSQL, MongoDB.

Experience in Front-end development with technologies such as React-Redux, Angular, Sass.

Familiar with CPU internal architectures.

Experience developing web applications with Django and Ruby on Rails.

Familiar with Spring Boot and Express.js

Experience with version control tools such as Git.

Experience with CI/CD tools such as Jenkins.

### > Networking Infrastructure:

Studies on Digital Communication theory.

Understanding of TCP/IP, HTTP, DNS, SSL.

Familiar with routing protocols and data center technologies.

Experience in cloud technologies such as Amazon Web Services, Google Cloud Platform, VMware vSphere vCenter and Openstack.

Experience with Cloud Native applications.

Experience with Infrastructure as Code technologies such as Terraform.

Familiar with configuration management tools such as Ansible, Chef, Puppet.

#### > Hardware Engineering:

Digital systems design and verification with VHDL on FPGAs.

Assembly / C programming of microcontrollers for embedded systems. Familiar with ARM Cortex architecture and Realtime Operating Systems.

Analog and digital circuits analysis and design skills.

Experience using high frequency lab equipment, such as network analyzers, spectrum analyzers, oscilloscopes.

#### > Bioengineering:

Strong foundations on Bioelectrical Signal Processing.

Understanding of medical devices and measuring techniques.

Foundations on physiological systems.

#### > Data Science:

Strong foundations on Linear and Non-linear Algebra, Calculus and Statistics.

Experience with Matlab/Simulink for data analysis.

Experience with Machine Learning and Deep Learning algorithms.

Experience with Machine Learning Frameworks such as Tensorflow and PyTorch.

Familiar with R programming.

## Professional Experience

#### Present

#### Roche

#### Febraury 2019

- > Leading quality engineering team for test automation.
- > Collaborate with DevOps tasks for Secondary Analysis in the cloud.
- > Responsible for selecting DevOps and Quality Engineers new hires.
- > Responsible for CI/CD in various projects.

#### Febraury 2019 December 2015

#### Telecom S.A

- > Responsible for NetDevOps automation.
- > Backend development for networking applications in Python and Ruby.
- > Front-end development with technologies such as React-Redux and Nodejs (HTML5, CSS, CSS-in-JS).
- > Worked with relational and non-relational databases (Postgres, MongoDB, Cassandra).
- > Designed a cloud native application with a micro-services architecture implemented in a Kubernetes cluster on OpenShift.
- > Environment configuration and management for workloads in public/private clouds.
- > Tools development in Go and C/C++.

### December 2015

#### Servicio Meteorológico Nacional

#### Febraury 2015

- > Staff member of the circuits design laboratory for meteorological instruments.
- > Meteorological measurement devices installation in Airports and Military bases.

# December 2009

#### January 2010 | Instituto Social Militar Dr. Dámaso Centeno

> Mathematics and physics teaching assistant for secondary school students.

## 🔼 Languages

Spanish: Native English: C2



## Projects

- > Heart Sounds Segmentation using a LSTM Neural Network and the Fourier Synchrosqueezed Transform (Bs. Undegraduate thesis).
- > Visual SLAM (Simultaneous Localization and Mapping) algorithm based on Extended Kalman Filtering and 1-Point RANSAC.
- > EKG segmentation using Empirical Mode Decomposition (EMD) and a Hidden Markov Model (HMM).



#### References

## Dr. Eng. Arini, Pedro,

@ pedroarini@conicet.gov.ar

Eng. Liguori, Ariel Marcelo,

@ arielik@gmail.com