

# Diego Quintana

## Bio

I am an Electrical Engineer who shifted his career from Power Grids Automation towards Computer and Data Science. I'm from **Osorno, Chile**, and I am currently living in Barcelona, Spain.

I am curious and creative, and I am most motivated when innovating and trying out new things. I am driven by values, and I value human relationships. I learn best by doing and sharing.

You can reach me at [daquintanav@gmail.com](mailto:daquintanav@gmail.com).

## Education

### Msc, Computer Science and Engineering (Expected)

- *Master in Innovation and Research in Informatics* with specialization in Data Science (MIRI-DS) at **Universidad Politécnica de Catalunya (UPC)**, Barcelona.
- From September 2019 to September 2021.

### Big Data Diploma

- A postgraduate Diploma (144 hrs) on Big Data at the **Pontificia Universidad Católica de Chile (PUC)**, Santiago, Chile.
- During the second half of 2017.

### Bsc, Electrical Engineering

BSc in Electrical Engineering (Six years degree), with specialization in Power Systems at **Universidad de la Frontera (UFRO)** in Temuco, Chile,

- Final grade 6.2 of 7.0
- Final project on “*Digital Substation: State of the art technologies and development of test modules using ABB devices*”
- From March 2008 to March 2016.

### Academic Exchange

- Academic exchange in the **Ruhr-Universität Bochum (RUB)** at Bochum (NRW), Germany.
- Thanks to a scholarship granted by the German Academic Exchange Service (**DAAD**)
- From August 2014 to August 2015.

## Work Experience

### Software and Data Engineer at CIAE, Universidad de Chile (Current position)

- From November 2017 to August 2019 (~1.5 years).
- Backend python developer and data engineer, with experience in public and private research projects related to education and social development.
- Developed extensible python ETL pipelines for cleaning and validating data obtained from the public sector in Chile.
- Participated as a teacher assistant in a training course on “*Data Science and Public Analytics*” for people of the *Chilean Department of Social Development* (English for *Ministerio de Desarrollo Social*)
- Developing currently a web application to manage visualizations related to the Public Education Sector in Chile, using **Flask**, **Docker** and **create-react-app**

Read more about the *Advanced Education Research Center* (english for *Centro Avanzado de Investigación en Educación de la Universidad de Chile*) in [www.ciae.uchile.cl](http://www.ciae.uchile.cl) (spanish)

### IT Consultant at AquaIntelligence

- Research on sensor technologies, and *Internet of Things* and machine learning applications related to the aquaculture industry
- Development of prototypes of database schemas and data analyst
- From July 2017 to October 2017 (~4 Months, part-time job)
- Government funded (CORFO Chile) startup project

## Project Engineer at ABB Chile

- From June 2015 to June 2017 (two years)
- Substation Control, Protection and Automation Engineer in the *Power Grids - Grid Automation* division
- Acted as a technical lead in +10 substation automation projects ranging from simple to mid complexity across Chile.
- Develop project schedules under constraints, interacting with all the units involved.
- Provided technical assistance to the Supply Chain and the Contract Management areas.
- Acted as a technical specialist of the ABB's *Digital Substations* and *IEC 61850* portfolio in Chile, supporting sales and performing as a speaker in conferences and training courses.
- Led projects that required delegating tasks and managing small teams from other countries within ABB.
- Speaker in the *X Jornadas Técnicas ABB* (X ABB Technical Conferences), about Digital Substations
- Winner of the "most innovative project" at company level *Hackathon* held worldwide in ABB, using Arduino and ESP8266 microcontrollers

Read more about ABB in [www.abb.cl](http://www.abb.cl)

## Tools, Skills and Programming Languages

- I'm comfortable using **Debian** based **Linux** distros.
- I'm proficient with **Python 3**. I have experience using the following packages (this is not an exhaustive list):

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- `Flask`
- `SQLAlchemy`
- `Alembic`
- `Click`
- `pytest`
- `pandas`
- `numpy`
- `unicorn`
- `scikit-learn`
```

You can check my results from a [PluralSight](#) python assessment I took in 2017, which is on my [StackOverflow profile](#). I've improved since then.

- I'm fairly productive with **git**. You can check my results in the assesment available at my [LinkedIn Profile](#).
- I try to use **Docker** and **PostgreSQL** in my projects.
- I have little experience managing Azure VMs, and Amazon EC2 instances with `docker-machine`.
- I have experience (and I like) **teaching**.

## Human languages

- Spanish (Native)
- English C1 (IELTS Academic certification, 2018)
- German B2/C1 (Test DaF certification, 2014)
- Catalá B1 (Currently learning at the *Consorti per a la Normalització Lingüística* in Barcelona)

## Professional preferences

I would like to contribute to solutions in one or more of these areas, with a focus on applications for the Social Good:

- Smart Grids and Smart Cities
- Networks and Distributed Applications
- Machine Learning and Artificial Intelligence
- Data-Intensive Applications

I wish to get better at doing applied research and possibly, to develop an academic path from there. I ~~will~~*would* consider positions that encourage this on their career paths.