

# Rodrigo E. Córdova López

DEVOPS ENGINEER

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## Summary

Current Data Scientist at start-up company Xmartlab. 2 years experience in the backend development, integrations and 2+ years experience in data processing and research in Computer Science. Specializing in generate, store and processing data efficiently. With a great interest in learn and teach. I can easily join work teams and leader them as well. I have a great interest in issues linked to creativity, innovation, research and above all to the application of them in real problems.

## Work Experience

### The Intern Group

Santiago, Chile

DATA SCIENTIST

Nov. 2018 - PRESENT

- Support and improve the company's data architecture, promoting scalability and reliability in a way that allows the exploitation and generation of relevant information, through complex statistical models to understand, decide and innovate in the different challenges presented by the operation of the company.

### Academia Desafío Latam

Santiago, Chile

CONTENT CREATOR

Sep. 2018 - PRESENT

- Develop the content of the Big Data module, covering identification of Big Data problems according to their characteristics, choose the appropriate strategies and technologies to process the data depending on its volume using tools such as Hadoop or Spark.

### Xmartlab

Santiago, Chile

DATA SCIENTIST

May. 2018 - Nov 2018

- Design and implement a large-scale data extraction mechanism.
- Automate data processing pipelines in an efficient and scalable way.
- Build micro data processing services using AWS Lambda, API Gateway, S3 and RDS.
- Design and implement a storage architecture for heterogeneous and unstructured data.

### Smartbots, spinoff of 2Brains

Santiago, Chile

DATA SCIENTIST

Aug. 2017 - May. 2018

- Promote the different lines of business based on the data. These lines mainly corresponded to retail and banking. Participation in:
  - Product recommendation for retail.
  - Characterization of customers.
  - Predictive model that allows to determine if a profile will match with the company based on the public information of its profile of social networks and the evaluation to candidates with similar characteristics.
  - Identification of the main intentions within thousands of conversations in different sources of information.
  - Construction of metrics and visualizations to measure performance, seasonality of bots use.

### 2Brains

Santiago, Chile

SOFTWARE ENGINEER

May. 2017 - Aug. 2017

- Design and implementation of software components using JAVA for the sales force services of a bank.

### Ticblue

Santiago, Chile

SOFTWARE ENGINEER

Jul. 2015 - May. 2017

- Design and implementation of software components using back-end technologies (mainly Ensemble by InterSystems and JAVA EE).
- Design of solutions under a vision of service-oriented architecture (SOA).
- Administration and exploitation of high performance database engine.
- Construction of integration components.
- Exploiting the transaction messaging of the ESB using BI tools.
- Integration between services of institutions (Registro Civil, Ministerio de Desarrollo Social and JUNJI) for the application process of postulants.
- Automation of information replacement activities, for remuneration payments of a government entity with more than 30,000 employees.
- Build Concepts Tests (POC) to support sales processes about real problems of potential clients.

## Research

### Universidad Andrés Bello

Santiago, Chile

RESEARCH TEACHING ASSISTANT

Oct. 2014 - Dic. 2015

- Combinatorial Optimization in Engineering:
  - Co-author in "A web application for location and vehicle routing in disaster". ITECKNE, 14(1):62–69, 2017
  - Collaboration with professors Gustavo Gatica, PhD., and Carlos Contreras, MSc, in the preparation of a scientific article that proposes a solution for the Travelling Salesman Problem with a specific variant, using a multi-operator genetic algorithm as a solution. Paper preparation 2019.

# Personal Projects

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## Improving Santiago's Public Transport Metrics

Santiago, Chile

SOFTWARE AND DATA ENGINEER

May. 2018 - PRESENT

- Done:
  - All about data collection; Transactions of BIP cards, alerts and positions of buses. This data is collected using different mechanisms, such as web scraping and calls to APIs in a concurrent and scalable way. The data is processed and stored efficiently. Every day increases the dataset around 8GBs. The data extraction was statistically adjusted to obtain as much data as possible at different times.
- Doing:
  - Generate metrics and visualizations efficiently, processing more than 600GBs.
- To Do:
  - Predict buses faults.
  - Generate alternatives to existing routes, depending on the variant demand.

## Predict Arrival Time

Santiago, Chile

DATA SCIENTIST

Feb. 2018 - Mar 2018

- Describe the behavior of shoppers.
- Use different Machine Learning models to predict the time of arrival of an order from an ecommerce to a customer.

## Building a clusters of similar people on Twitter

Santiago, Chile

SOFTWARE AND DATA ENGINEER

Oct. 2017 - Dic 2017

- Extract and store data efficiently.
- Prepare and clean data. Process more than 1.5 TB of text data in a distributed way.
- Build clusters of similar people.

# Skills

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<b>Data Science</b>	Pandas, Numpy, Scikit-Learn, Matplotlib, Seaborn, Jupyter.
<b>Machine Learning</b>	K-NN, Naive Bayes, SVM, Decision Forests, Association Rules, Linear Regression, Hierarchical Clustering.
<b>Big Data</b>	Apache Spark, Hive, Hadoop.
<b>Programming</b>	Python, JAVA, R, C++, Caché Object Script.
<b>Cloud Services</b>	AWS (EMR, Lambda, S3, DynamoDB, RDS, EC2, API Gateway), GGP (Dataproc, Data Storage).
<b>Languages</b>	Spanish, English.

# Education

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## Universidad Andrés Bello

Santiago, Chile

COMPUTER SCIENCE ENGINEERING - INGENIERÍA CIVIL INFORMÁTICA

Mar. 2010 - Dic. 2016

- Teaching Assistant:
  - Data Structures.
  - Software Engineering.
  - Modeling and Programming.
  - Databases.
  - Data Modeling.
  - Mathematical Methods in Engineering.
  - Programming Fundamentals.

# Extracurricular Activity

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## Universidad Andrés Bello

Pichulemu, Chile

HEAD OF SOCIAL ACTIVITIES

Jun. 2013

Participation in the construction of community labor, where my main task was to organize and manage social activities that were scheduled for the community place in which we worked for 3 weeks.