# Alex Molas

# Physicist & Data Scientist

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#### Education

2016–2017 M. Sc. Physics for Complex Systems, CSIC-IFISC, Mallorca, final grade 9.1/10.

2012-2016 B. Sc. Physics, Autonomous University of Barcelona, Barcelona, final grade 7.8/10.

2010–2012 Scientific Baccalaureate, La Farga, Sant Cugat, final grade 11.6/14.

#### Working Experience

Nov 2019 - Data Scientist, STUART, Barcelona.

current I worked in the ETA prediction group, developing a service to forecast pre-order ETAs. I also worked in the development and optimization of Vehicle Routing Problem solutions. **Skills**: *AWS*, *Python*, *Docker*, *Forecasting*, *Machine Learning*, *Optimization*, *Operations Research*, *SQL*.

Jun 2019 - **Data Scientist**, 21 BUTTONS, Barcelona.

Oct 2019 I worked in the Recommendation Squad, developing, deploying and monitoring recommender systems in a fashion trend social network. In particular, I implemented recommender systems based on implicit data, using state of the art techniques, such as Alternative Least Squares, Bayesian Personalized Ranking, and Logistic Matrix Factorization. **Skills**: *AWS*, *Python, Complex Networks, Machine Learning, Recommender Systems, SQL*.

May 2018 - Data Scientist, PRIVALIA, Barcelona.

Jun 2019 Development and deployment of machine learning algorithms for sales forecasting and pricing in a flash sales e-commerce. Working closely with Business Units to understand the needs of the business and determining how the Data Science team could help with them. **Skills**: AWS, Forecasting, Google Cloud Platform, Machine Learning, Python, Spark, SQL

Oct 2017 - SEM Data Analyst, GAUSS & NEUMANN, Barcelona.

Feb 2018 Development of tailored SEM structures for companies with a intensive SEM spending. I had to understand the needs of the client to develop, analyze and optimize the right SEM structure for them, using our own SEM technologies. **Skills**:

Data Analysis, Python, Google AdWords

Jan 2017 - Researcher, IFISC, Palma de Mallorca.

Sep 2017 Study of the mobility in dense urban areas using geo-localized Twitter data. Apart from the data analysis, I developed a theoretical framework inspired by physics to model the commuting behavior of people in cities. The results were published in Nature Communications. **Skills**: Complex Networks, Complex Systems, Data Analysis, Physics, Python, Research

## Projects & Courses

course Machine Learning course, by Stanford University (Coursera).

contest 2018 Novartis Datathon - Participation in the Financial Datathon organized by Novartis and Eurecat.

publication Nature Communications - Field theory for recurrent mobility.

contest 2017 IFISC Best Poster Award - "Social network analysis of communities in Literature".

contest 2015 University Physics Competition - Bronze Medal.

### Languages

Spanish first language Catalan first language English working proficiency

#### About me

I'm a curious and passionate physicist who loves to work on statistical modeling. Among my main interests are machine learning, the study of complex networks, mobility research, data analysis and data visualization. When I'm not working you can find me reading, climbing or volunteering (I went to Portugal, Switzerland and Ethiopia among others).

## Keywords

 $Amazon\ Web\ Services-Complex\ Networks-Docker-Forecasting-Functional\ Programming-Google\ Cloud\ Platform-Machine\ Learning-Optimization-Physics-Pricing-Python-Recommender\ Systems-Scala-Spark-SQL$