

# Michela Di Lullo

## Details

First Name and Last Name

Citizenship

Date of Birth

Phone

Email

Skype

## Profile

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Data Scientist with three years of professional experience building predictive models and developing data-driven solutions to complex business problems.

## Employment History

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### Crisma Srl, Rome

Oct 2017 – Present

#### Data Scientist

- I analyzed large data sets to help companies make decisions based on findings;
- I used algorithmic and programming tools to build helpful predictive models;
- I developed algorithms based on statistical analysis and predictive data modeling that were used to deepen relationships, strengthen longevity and personalize interactions with customers;
- I tracked performance and identified business improvement trends.

### IWS Consulting Srl, Rome

Feb 2017 – Sep 2017

#### Data Scientist

- I worked to assess companies' needs and resolves issues with the use of data;
- I performed exploratory data analysis aimed at discovering relationships;
- I analyzed and processed complex data sets using advanced querying, visualization and analytics tools;
- I identified new external data sources.

## Academic Education

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### **PhD in Operations Research**

Oct 2013 – Oct 2016

PhD School of Information Science and Technology

University of Rome "La Sapienza"

Phd Thesis: *"Optimization of generation and transmission topologies in bulk power systems."*

### **Master's Degree in Management Science and Statistics**

Oct 2011 – Oct 2013

Department of Statistical Sciences

University of Rome "La Sapienza"

Final vote: 110/110 cum laude

Master Thesis: *"Tight mixed integer linear programming formulation for the unit commitment problem."*

### **Bachelor's Degree in Management Science and Statistics**

Oct 2008 – Oct 2011

Department of Statistical Sciences

University of Rome "La Sapienza"

Final vote: 107/110

Bachelor Thesis: *"Traffic impact-assessment of the new Rome's Metro C Line using simulation and queuing theory."*

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## List of Previous Projects

### Fundraising Analytics:

#### **Customer: UNHCR (*United Nations High Commissioner for Refugees – UNHCR*)**

- Fundraising database cleanup;
- Development of a *Propensity to Cross-sell* model and of a *Propensity to Up-sell* model as part of the UNHCR fundraising operation to find out which donors have potential to make larger gifts;
- Development of analysis methods to test and monitor effectiveness of fundraising strategies, tools and methodologies through the study of behaviors of supporters;
- Development of an analytical tool to identify potential middle/major gift donors;
- Development of a predictive tool built on machine learning aimed at preventing and understanding the reasons of donor churn;
- Supervision of the CRM data migration process;
- Fundraising Report Software for (Potential) Middle and High Value Donors Analysis;
- One off donor attrition analysis.

#### **Customer: Medici senza Frontiere**

- Development of a One-off Donors *Propensity to Conversion* model as part of the Medici senza Frontiere fundraising operation to find out which donors are more likely to convert into regular givers.

### Logistics:

#### **Customer: SDA Express Courier (*Poste Italiane Group*)**

- Optimization of a distribution system for freight transport by minimizing the number of industrial vehicles used for freight transport on a weekly basis and maximizing the profitability of each individual journey/vehicle;
- Development and monitoring of KPIs for transportation performance.

### Gaming:

#### **Customer: Sisal (*Lotterie Games Products*):**

Net lottery revenues forecasting using regression models.

### Real Estate:

#### **Customer: YARD (*Independent Real Estate Services*)**

Application of regression models and sentiment analysis to predict real-estate prices in Italy.

### Energy:

#### **Customer: A2A (*Energy Solutions*)**

Development of statistical models to predict asset pricing anomalies through natural language processing tools.

### Automotive:

#### **Customer: Fiat Chrysler Automobiles (*FCA*)**

Mid-term copper prices forecasting using regression models.

#### **Customer: Autostrade per l'Italia**

Development of tools for data analysis and visualization.

## Publications

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*“Tight Unit Commitment models with Optimal Transmission Switching: Connecting the dots with perturbed objective function”*

Published in: 2014 Complexity in Engineering (COMPENG)

*“A Unified view on tight formulations for the Unit Commitment Problem with Optimal Transmission Switching”*

Published in: 2014 Gaspard Monge Program for Optimization - Optimization & Practices in Industry

## Technical Skills

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### Programming languages

R, AMPL, Julia, Matlab, SQL.

### Data Analysis and Statistical Software

SPSS Modeler, SPSS Statistics, KNIME.

### Databases

SQL Server Management Studio, MySQL Workbench, Oracle SQL Developer.

## Certifications

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IBM Certified Specialist - SPSS Modeler Professional v3

KNIME Certification: Advanced Proficiency in KNIME Analytics Platform and Basic Machine Learning

KNIME Certification: KNIME Server

KNIME Certification: KNIME Big Data

KNIME Certification: KNIME Text Mining

IELTS Language Certificate