

# Mario Humberto Becerra Contreras

## *Curriculum vitae*

### CONTACT

---

**Location:** Mexico City, Mexico  
**Phone number:** +52 1 55 1513 0162  
**Email:** mbecerracontreras@gmail.com  
**Github:** <https://github.com/mariobecerra>  
**Webpage:** <http://mariobecerra.com>  
**LinkedIn:** <http://linkedin.com/in/mbecerrac>

### ABOUT ME

---

I'm an applied mathematician and computer scientist. My main interests are statistical modeling, predictive analytics, data visualization and machine learning.

### WORK EXPERIENCE

---

SEPTEMBER 2017 - PRESENT DAY

Data scientist

#### *Business Data Evolution*

Statistical modeling and predictive analysis in data science consulting company.

MAY 2016 - JUNE 2017

Data scientist

#### *CAD Salud*

Statistical models and data visualization for data projects aimed toward health problems.

OCTOBER 2015 - MAY 2016

R&D Analyst

#### *MetronHomo, Grupo Salinas*

Statistics, machine learning and data visualization for market research consulting.

JUNE 2015 - AUGUST 2015

Junior Analyst

#### *Revenue Management, Best Day*

Summer project involving customer analysis and market segmentation.

JUNE 2014 - JUNE 2015

Data analyst

#### *Computer Research and Analysis Laboratory, ITAM*

Machine learning application in Natural Language Processing for automation in news classification for media monitoring company.

DECEMBER 2013 - MAY 2014

Global Banking and Markets Intern

#### *HSBC*

Financial products pricing, financial products analysis, Excel spreadsheets creation for statistical analysis.

### EDUCATION

---

2015

Instituto Tecnológico Autónomo de México (ITAM)

*Applied Mathematics B.Sc.*

Elective courses from statistics, computer science and finance fields.

PRESENT DAY

Instituto Tecnológico Autónomo de México (ITAM)

*Computer Science M.Sc.*

Expected completion: December 2017.

Note: Took 8 out of 12 courses offered in the Data Science master program at ITAM.

### SKILLS

---

#### *Statistics*

Generalized Linear Models, Bayesian statistics, model validation, PCA, correspondence analysis, spatial statistics, simulation, Bayesian networks, clustering, hierarchical models

#### *Machine Learning and Data Mining*

Random Forest, support vector machines, recommender systems, market basket analysis, association rules, Natural Language Processing, text mining, social network analysis, image processing, artificial neural networks

#### *Programming languages and other technologies*

R, Python, git, MATLAB, SQL,  $\LaTeX$ , bash, C, C++, Java, Apache Spark, Apache Hadoop, Apache Hive

#### *Finance*

Interest rates, financial derivatives, fixed income products, structured finance, VaR

#### *Other*

Linear programming, constrained and unconstrained numerical optimization, analysis of algorithms, business intelligence, finance, compiler design, distributed systems, computer architecture

### LANGUAGES

---

SPANISH Native

ENGLISH Highly fluent, almost native