

# Mario Humberto Becerra Contreras

## *Curriculum vitae*

### CONTACT

---

**Location:** Mexico City, Mexico  
**Phone number:** +52 55 1513 0162  
**Email:** mariob.c@hotmail.com  
**Github:** <https://github.com/mariobecerra>  
**Webpage:** [mariobecerra.github.io](http://mariobecerra.github.io)  
**LinkedIn:**  
<http://mx.linkedin.com/in/mariobecerracontreras>

### ABOUT ME

---

I am an active, open, flexible and versatile worker. I have leadership and teamwork skills, and I can adapt to functions I have no previous experience in. I am, in general, a responsible, honest, disciplined and engaged person who likes things well done.

I enjoy solving problems in an analytical and logical way; and, especially, using data in order to obtain useful information that, at first hand, may not be obvious or intuitive.

### WORK EXPERIENCE

---

JUNE 2014 – PRESENT DAY

Data Mining, NLP, data analysis

*Computer Research and Analysis Laboratory, ITAM*

Machine learning, data mining and statistics application in Natural Language Processing for automation in news consultation for media monitoring company. In particular, Named Entity Recognition, news classification and sentiment analysis.

DECEMBER 2013 – JUNE 2014

Global Banking and Markets Intern

*HSBC, Mexico*

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

### EDUCATION

---

2010 – PRESENT

Instituto Tecnológico Autónomo de México (ITAM)

*Applied Mathematics*

Thesis under development; expected graduation on December 2015.

Elective courses from statistics, computer science and finance fields. Some electives were part of the Data Science MSc program.

### SKILLS

---

#### *Programming and computers*

R, MATLAB, SQL, Python, SPSS, ~~W~~TeX, Java, Visual Basic, Linux, Bash, C#, Github, Microsoft Visual Studio, Microsoft Excel

#### *Statistics*

Linear regression, model validation, Generalized Linear Models, multivariate statistics, principal component analysis, correspondence analysis, geostatistics, Bayesian networks, Bayesian statistics, Hidden Markov Models, clustering

#### *Machine Learning*

Random Forest, ExtRa Trees, neural networks, support vector machines, recommender systems, market basket analysis

#### *Finance*

Interest rates, financial derivatives, fixed income products, structured finance, Bloomberg terminal

#### *Other*

Data Mining, Natural Language Processing, image processing, text mining, linear programming, business intelligence

### LANGUAGES

---

SPANISH Native

ENGLISH Advanced (TOEFL: 657)

### SCHOOL AND EXTERNAL PROJECTS

---

SUMMER 2014

#### *Natural Language Processing*

Wrote an article about the creation of a mathematical language model.

SPRING 2014

#### *Page Rank algorithm*

An application of the *Page Rank* algorithm in determining important nodes in highway networks, electricity networks and neurons of a worm.