



### M.S in Computer Science

Instituto Politécnico Nacional,  
IPN

2020, Ciudad de México

### B. in Genomic Sciences

Universidad Nacional  
Autónoma de México,  
UNAM

2017, Cuernavaca, Morelos



+52 6673 506 506

@elbecerrasoto@gmail.com

github.com/elbecerrasoto



#### Python Programming

★★★★★

numpy, pandas, matplotlib

★★★★★

scikit-learn, PyTorch

★★★★★

R Programming

★★★★★

Data Wrangling & EDA

★★★★★

Pipelines & Scripting

★★★★★

Machine Learning

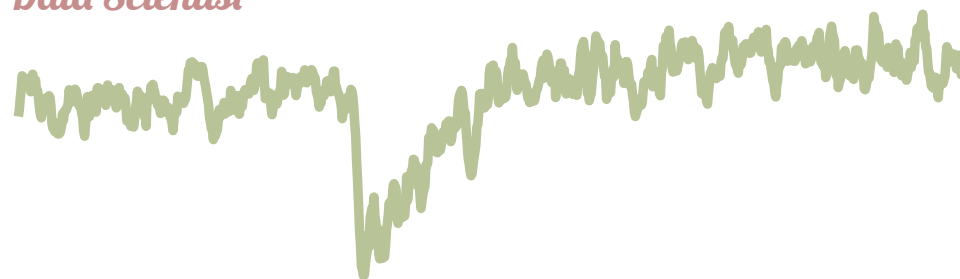
★★★★★

Statistical Modeling

★★★★★

# EMANUEL BECERRA SOTO

*Data Scientist*



## Data Scientist

2017-2015

Genetics Institute  
at University of Florida

I worked on a big data project about Salmonella enterica. Some critical genes were found that could be used against Salmonellosis outbreaks. The results could be seen here (link).

- ✦ R Programming
- ✦ Python & BASH scripting
- ✦ Statistical Hypothesis Testing
- ✦ Top 500 supercomputer (hipergator) jobs of 100 RAM and ~5 days duration
- ✦ Analysis of ~1 TB of raw data
- ✦ Data Wrangling & EDA  
Command-Line & Python
- ✦ Visualization



## M.L. Instructor

2020-2019

IPN Computer Research Center

I gave the lecture “Unsupervised Learning” for the weekly course “Machine Learning for the Industry” at the IPN Computer Research Center, during its editions of 2019 and 2020.

- ✦ Team Work
- ✦ Unsupervised Learning  
Clustering and Dimensionality Reduction
- ✦ Communication
- ✦ scikit-learn



## Python Developer

2021-2018

IPN Computer Research Center

I designed and implemented a framework for Reinforcement Learning, this concluded with the creation of a Python library, which can be seen here (link). The library is actively used.

- ✦ Python Library Implementation
- ✦ Machine Learning
- ✦ Deep Learning  
PyTorch
- ✦ Problem Abstraction and Modeling
- ✦ Scientific computing with Python  
numpy, matplotlib, SciPy
- ✦ API Design
- ✦ Software Engineering  
VCS, TDD, Kanban



## About

The world of data is full of wonders, of them, my favorite ones are Data Epiphanies.

A Data Epiphany is when an unintuitive result appears, outshining other noisy clues, a moment of total clarity. However, there is a price attached to them, a struggle with the data, a tenacious exploration, and clever modeling.

Nonetheless, the difficulties are worth it, actionable insight is priceless.