

**Mauricio Gonzalez Soto.**

**DoB:** 09-September-1989.

## Education.

- **Instituto Nacional de Astrofísica Óptica y Electrónica (INAOE).**
  - **PhD. in Computer Science.**  
September 2017 - August 2021 (expected).  
Thesis: “Use and acquisition of causal relations for decision making under uncertainty using imperfect information games”  
Thesis Proposal defended and approved in November 2018.  
Advisors: Dr. Luis E. Sucar<sup>1</sup> and Dr. Hugo J. Escalante<sup>2</sup>.
- **Instituto Tecnológico Autónomo de México (ITAM).**
  - **MSc. in Data Science.**  
August 2015 - August 2017.  
Thesis: “Modelling Twitter Communities with Graphs” (in spanish).  
Advisor: Dr. Fernando Esponda Darlington.  
Special Mention Awarded.
  - **BSc. in Applied Mathematics.**  
August 2008 - May 2014.  
Thesis: “Continuous State Branching Processes: A Backbone-style decomposition” (in spanish).  
Advisor: MSc. Mauricio B. García Tec.  
Special Mention Awarded.
- **Pontificia Universidad Catolica de Chile.**
  - Courses from the Statistics PhD. Program with Dr. Fernando A. Quintana, PhD. and Dr. Rolando Rebolledo. 2012.

## Extra.

**Languages:** Advanced English (C1; IELTS 7.5). Basic German (A1). Basic French (A1).

**Computer Skills:** R. Python (2.x, 3.x). Spark (PySpark). Neo4j and Cypher Query Language. Matlab. Amazon Web Services (EC2, RDS). C and extensions for parallel programming. Docker (docker machine, docker swarm). Git. BUGS and JAGS. Command Line Tools (Bash, Awk, Sed). LaTeX, Rmarkdown, Rbookdown.

## Working Experience.

- Data Scientist, **Institute of Analytics.**  
Mapping the Startup Ecosystem in Mexico: modelling Twitter data with graphs in Neo4j; twitter topic extraction and graph modelling of conversations.  
October 2016 - June 2017.
- Research Assistant, **Statistics Department-ITAM.**  
Research Assistant of Dr. Victor Guerrero.  
May 2016 - May 2017.
- Labor Trials Outcome Predictor, **Law Department-ITAM.**  
Predicting the outcome of Labor Trials using Machine Learning, working under the supervision of Prof. Joyce Sadka, PhD., J.D.  
September 2016 - December 2016.
- Research Internship, **BBVA-Bancomer.**  
Financial Risk Contagion using Complex Networks.  
June 2016 - September 2016.

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<sup>1</sup><https://ccc.inaoep.mx/~esucar/>

<sup>2</sup><https://ccc.inaoep.mx/~hugojaier/pmwiki/>

- Financial Risk Manager, **Banco Santander México**.  
September 2014 - December 2014. Summer 2011.

## **Publications**

- Gonzalez-Soto, M., Sucar, L.E., Escalante, H.J., **Playing against Nature: causal discovery for decision making under uncertainty**. CausalML 2018 Workshop at ICML 2018. Stockholm, Sweden.

**Research Interests:** Causality and Causal Inference, Decision Making under Uncertainty, Game Theory, Causal learning in humans, Behavioral Economics, Bayesian Statistics.

## **Conferences and Congresses.**

- Poster presentation in CausalML Workshop, ICML 2018.
- Attended Topological Data Analysis Winter School, CIMAT, 2015.
- Attended XI Symposium on Probability and Stochastic Processes, CIMAT, 2013.

## **Reviewing Experience.**

- Reviewer for the NeurIPS 2019 Competition Track

## **Contact:**

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