fernanda mora

B.Sc. Applied Mathematics

■ B.Sc. Actuarial Sciences

■ M.Sc. Computer Science candidate



about Mexico city

a.cotton.soul@gmail.com

github.com/Sophie-Germain

sophiegermain.github.io/

languages spanish (native)

english (native) english (high proficiency)

programming

R, Python, Matlab (fair) Java, C, Bash (basic)

other

PostgreSQL, LaTeX, Sublime, Office Suite, GitHub, Docker

about

"If you cannot measure it, you cannot improve it". My major goal is to **generate value** through *state-of-the-art technologies and models* that tackle relevant problems in *society, government and companies*. My second goal is to promote a quantitative & data-driven approach to problem-solving and decision-making.

To achieve this I have developed a unique academic & industry experience that combines theory + research with a practical + client-oriented approach.

Please take a look to my website to find a more detailed picture of my research, as well as my academic and industry experience.

Academic interests

- Computer Science: computer architecture, distributed computing, Android OS security
- · Machine Learning: Deep Learning
- Data Science: Big Data, Cloud computing
- Pure Mathematics: Set Theory, Functional Analysis, Group Theory
- Statistics and Finance: Bayesian, Derivatives, Risk Theory

Non-academic interests

- Strategic and Management Consulting
- · Value proposition and pricing
- Business intelligence analytics with data-driven solutions
- Integration, management, securing, and analysis of enterprise and governmental data
- Startups
- · Web Development

education

since 2015 M.Sc. candidate in Computer Science Instituto Tecnológico Autónomo de Mexico

Working on machine reading comprehension

2015 B.Sc. in Applied Mathematics Instituto Tecnológico Autónomo de Mexico

Thesis with special mention: Deep Learning Fundamentals Applied to Electric

Energy Consumption Forecasting in Mexico. Link to thesis Link to deck

2012 B.Sc. in Actuarial Sciences Instituto Tecnológico Autónomo de Mexico

Link to thesis

academic experience

2016, 2m	Carnegie Mellon University Worked with Profr. Eric Nyberg in Machine Learning models for Q&A at the Language Technologies Institute. Link to project report
2016	Instituto Tecnológico Autónomo de Mexico Graduate Seminar Professor Teaching Data Mining tools to support decision making. Github repo
2015, 6m	Computational Research and Analysis Laboratory (ITAM) Data Scientist Machine learning and visualization of credit data for nonpayment prediction
2010, 6m	Instituto Tecnológico Autónomo de Mexico Economics IV (non-competitive markets) Teaching Assistant

industry experience

since 2015	Freelance consulting Business strategy, data mining and statistical consulting	Consultant
2015, 2m	AbbVie Mexico Tailor-made value propositions for AbbVie's drug portfolio	Project Coordinator
2013-2014	LifeSciences Consultants Management Consultant Health economics, cost-effectiveness analysis, market access strategies	
2010-2011	Sociedad Financiera Campesina Evaluation and assessment of credit portfolios	Financial Analyst
2012, 3m	ADRISA Estimation and forecasting of the premium of life insurances	Actuarial Analyst
2009-2010	Cuasar Capital S.C. Financial assessment of infrastructure and real-state project	Financial Analyst

publications

Local layered algorithmic model for topological design of rural telecommunications networks. Presented on the International Conference on Operations Research for Development, ICORD 2016. Link to paper

Carga Económica de la Diabetes Mellitus en México, 2013. Fundación Mexicana para la Salud A.C. Link to paper

conferences

International Conference on Operations Research for Development, ICORD 2016: Presenter of a paper and revisor of two papers.

acknowledgments

- 90% Bachelor's tuition scholarship for strong academic performance
- 60% Master's tuition scholarship for strong academic performance
- National Council of Science and Technology Master's scholarship for strong academic performance

skills & competencies

 Unique academic-industry profile that combines theory and research with practice and client experience

- Solid mathematical modeling, research, analysis and problem solving techniques
- Multidisciplinary knowledge of relevant areas such as data science, computer science, statistics, probability, finance and economics
- Creative, entrepreneurial, efficient, a quick-learner, enthusiastic about intellectual challenges, trust-worthy, a team player and hard-working