Mariana Martínez

Curriculum Vitae

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⊕ mtzmarianaa

Clickable links are underlined

Education

2021-present	**Courant Institute, NYU**, *MS in Mathematics, New York, NY*
2016-2020	**Instituto Tecnológico Autónomo de México (ITAM)**, *Bachelors in Applied Mathematics,Mexico City, Mexico*

Projects

Dec 2021	**An Application of Gaussian Processes and SURF Method for Mexican History of Painting**, *GP, SURF, MATLAB*
August 2021	**Short Text Classification For Customer Service Bot**, *Gibbs sampler, SVM, NLP, Python*
May 2021	**Wavelet analysis and Artificial Intelligence for Mexican Artists' Style recognition**, *DTCWT, HMM, DWT, FFT, SVM, Autoencoders, Random Forests, MATLAB, Python, R*
Dec 2020	**Hypothesis in Simulation**, *MCMC, Numerical Integration, R*
Dec 2020	**Genetic Algorithm for The Travelling Salesman Problem**, *Genetic algorithms, Python*
Dec 2020	**Numerical Polygon Optimization**, *Interior points method, MATLAB*
Dec 2019	**Simplex and Dual Simplex Method Implementation**, *MATLAB*
May 2018	**Joukowsky transformation for F1 car's wings**, *MATLAB*

Experience

Dec 2020 - present	**Data Scientist/Engineer**, *IV.AI*
Fall 2019	**TA Programming with R**, *Recitation Leader*
Spring 2020	**TA Programming with R**, *Recitation Leader*

Technical Skills

Programming	**MATLAB, R, Python, Java, SQL, Tensorflow, PyTorch, MongoDB, Cassandra, Git/Github, Observable, GGMap, Plotly, Postman**
Languages	**Spanish (native), English (bilingual proficiency), German (bilingual proficiency), French (limited working proficiency)**

Coursework

Grad Courses	Computational Statistics (Courant), Complex Analysis 1-term (Courant), Linear Algebra 1-term (Courant), Numerical Optimization (ITAM), Applied Numerical Analysis (ITAM), Simulation (ITAM), Research Operations Methods (ITAM), Linear Programming (ITAM), Stochastic Processes (ITAM)
Undergrad Courses (SUT)	Calc 1-3, Linear Algebra 1-3, Math Analysis 1-2, Probability 1-2, Applied Statistics 1-2, Dynamical Systems 1-2, Modern Algebra

Other courses

Online courses	Big Data Specialization (2021, Coursera), Understanding the Brain: The Neurobiology of Everyday Life (2020, Coursera), Deep Learning with Tensorflow (2020, EdX), Python Data Science (2020, EdX), From Poverty to Prosperity: Understanding Economic Development (2020, EdX), High - Dimensional Data Analysis (2020, EdX)
In-person Courses	Advanced German (2021, Goethe Institut), German (2019, BWS Berlin), Economics Week/Wirtschaftswoche (2016, Wirtschaftswoche)