MARCO ANTONIO CHACÓN AMARO
Software Developer | Applied Mathematician

(+52) 55 5197 1917 **|** marco.chacon1796@gmail.com **|** github.com/MarcoC1796 **|** linkedin.com/in/marcochacon/

EDUCATION AND CERTIFICATES

Instituto Tecnológico Autónomo de México (ITAM, GPA: 9.2/10) **Mexico City, MX**
B.S. Applied Mathematics, minor in Computer Engineering *August 2016 – May 2022*
- Excellence in Engineering Scholarship (originally majoring in computer engineering).
- **Research Thesis**: Performance of Collaborative Filtering Methods for Recommender Systems.
- **Relevant Courses**: Computer Applications, Algorithms, Artificial Intelligence, Machine Learning, Applied Statistics.

ZTM **ONLINE**
Front-End Developer Bootcamp Project *October 2022 – Present*
- Developing an e-comerce website using the most recent React.js features to build a scalable, performant, and easy to maintain application along with Typescript, GrapghQL APIs, Firebase Backend and hosting it on Netlify.

Web Developer Bootcamp Project *December 2021 – March 2022*
- Programed a Face Detection App with a React.js Frontend, a Node.js API backend developed with Express.js, and a PostgreSQL database that stored users.

MITx: **ONLINE**
Machine Learning with Python-From Linear Models to Deep Learning *December 2021 – March 2022*
- **Projects:** Automatic Review Analyzer (Regression and Classification Models), Digit Recognition System (Deep Learning), Collaborative Filtering via Gaussian Mixtures, Reinforcement Learning Text-Based Game (Q-value Iteration).
- **Technologies**: Python, PyTorch, Numpy.

DeepLearning.AI **ONLINE**
Improving Deep Neural Networks: Hyperparameter Tuning, Regularization and Optimization *January 2021*

Neural Networks and Deep Learning *February 2021*

SKILLS

Programming Languages **Spoken Languages**
Python, Java, JavaScript/Node.js, Typescript, PHP/Hack, R. English (Advanced), Spanish (Native).

Software Technologies
React.js, Express.js, SQL, MongoDB, Django, GraphQL, Django, HTML5, Sass, Linux, Git, GitHub.

WORK AND RESEARCH EXPERIENCE

ITAM **Mexico City, MX**
Thesis Researcher *January 2022 - Present*
- Comparing recommender systems collaborative filtering methods through machine learning, matrix factorization, probabilistic, real analysis, and optimization techniques.
- Implementing models using state of the art technologies like python, numpy, scikit learn, matplotlib and seaborn.
- Analyzing empirical market data to test performance and validate analytical techniques.

META (FACEBOOK) **Menlo Park (Team) – Mexico City (Remote Location)**
Software Engineer Intern – Recruiting Technologies *August 2021 – November 2021*
- Designed and developed an end-to-end full stack web app to increase candidate ingestion into the recruiting funnel and improve recruiter's candidate application management.
- Implemented the Back End using PHP/Hack, making calls to a graph database, and exposing API endpoints through GraphQL. Implemented the Front end using React and TypeScript using reusable components and state of the art practices.
- Acquired communication, documentation, search, and time management skills to be successful in a cross-functional and high-paced work environment.

SESPEC **Mexico City, MX**
Software Engineer Intern – Risk Management *January 2021 – June 2021*
- Coordinated external/internal software providers to deliver quality software products for infrastructure risk management with limited time and resources to clients.
- Developed CRM, BI, and geographical dashboards tools using Python, Django and React.

SESPEC   **Mexico City, MX**

Data Science Intern – Risk Management   *March 2020 – December 2020*

- Implemented a vulnerability index classifier in R using fuzzy and unsupervised learning models that helped the local government allocate resources for people vulnerable to COVID-19.
- Implemented Data Pipelines in Python and Java that resulting in a 60% decrease in time to gather, clean, and process information from different API's, plain texts, and websites.

ITAM   **Mexico City, MX**

Teaching Assistant - Mathematics   *August 2019 – December 2019*

- Acquired communication and presentation skills by giving Calculus Laboratory to 20 students.

LEADERSHIP AND VOLUNTEERING EXPERIENCE

SIAM Student Chapter Representative (Student Org)   **Mexico City, MX**

Secretary   *August 2021 – July 2022*

- Organized and budgeted events to allow graduate and undergraduate STEM students to present their research projects to a large audience, network with other researchers, and connect with industry experts.

ITAM Construye (Student Organization)   **Mexico City, MX**

Program Manager   *August 2018 – May 2020*

- Increased enrollment to the program by 75% by organizing more events, implementing dynamic activities, and supervising quality of lessons all with limited resources.