

Jorge Macías Gómez

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<https://github.com/UlmoMacias>
<https://ulmomacias.github.io>

EDUCATION

Universidad Nacional Autonoma de México, UNAM

Graduating in December 2022

Bachelor of Science in Computer Science

2016

Bachelor of Science in Data Science

2020

RESEARCH EXPERIENCE

University of California, San Diego.

California, USA

June 2018-Aug 2018

- Made a research internship at University of California, San Diego, UCSD, under the supervisor of Dr. Vineet Bafna and Dr. Nam Nguyen, where I work with DNA CSV data files, trying to look for patterns and cycles on oncogenes, searching for overlapping DNA intervals to find genes on certain structures on Python.

WORK EXPERIENCE

Professor Assistant. <http://www.fciencias.unam.mx/directorio/91701>

2020

Professor assistant at UNAM, "Seminario de Finanzas 1".

- Responsible of answering python doubts, evaluating homeworks, and teaching technical technologies, such as Python, GitHub.
- Made a cloud-based judge that automatizes homework evaluation.
- Main professor, [Mauricio Labadie Martínez](#)

TOGA Soluciones.

2019

Worked with back-end and front-end of a call center web page which is an interface of VICI-Dial with additions.

- Worked with back-end using VICI-Dial.
- Worked with front-end using PHP, Laravel, Javascript.

ISSABEL.

2019

Worked with back-end and front-end of web application ISSABEL CLOUD which is a call center on cloud.

- Worked with back-end using Ruby and ISSABEL.
- Worked with front-end using Rails, Javascript and HTML.

UNIVERSUM Museum of science, UNAM.

2019

Worked as 'anfitrión' of Universum.

- Worked as a guide, organizing activities, attending scholar groups.

Cubo21 and CEM organization.

2018

Math Lecturer.

- Volunteer to prepare a group of forty young adults and thirty junior high students for the UNAM admission test.
- Responsible for preparing and delivering the content, as well as the evaluation.

MAJOR PROJECTS (Project repos on GitHub: <https://github.com/UlmoMacias>)

Tetris

Oct 2016

Typical Tetris game made with java that storage scores on a CSV file.

- Designed and developed using Java.
- You can accelerate the game.

Game of life

Oct 2016

Playable Game of life that follows John Conway's rules.

- Designed and developed using Java.

Two Cellular automaton

Nov 2016

Two types of Cellular automaton.

- Implemented both using Java and Java Swing.
- One of them is the Game Of Life using Moore Neighborhood.
- And, Forest in Flames, a probability Cellular Automaton.

Calendar Correlation

Sep 2017

Calendar Correlation between Gregorian and Tonalpohualli (Aztec and Mexica Calendar).

- Implemented using Java,
- Considers Gregorian Reform.

Steganography using LSB method.

Nov 2017

Program in Java that encrypts an image using LSB (Less Significant Bit).

- Encrypts an image using Less Significant Bit.

Shamir Secret Sharing Scheme.

Dec 2017

Encrypts a text using a password.

- Implemented using Java, security and crypto.
- It uses Polynomial interpolation.

Online Judge and WebPage

Dec 2020

Made an online judge, evaluates python dataframes.

- Server made using PHP, Apache, MySQL
- Using API calls to get dataframes evaluated.
- Mounted on a free tier AWS server.

Web Dashboard

Dec 2020

Made a web dashboard, cards with priority, owner, and more info.

- Reads a JSON file and updates cards on it
- Done with React and Bootstrap.

Web Currency Converter

Dec 2020

Made a web app that consults currency prices from an API service.

- Made using Angular and bootstrap.

SKILLS

PROGRAMMING LANGUAGES

4 years: Java, Python

3 years: Haskell, C, Prolog, JavaScript, C++, TeX, Ruby, HTML, CSS.

Languages

Advanced English (CAE).

Intermediate German (B1)

Basic Russian (A1)

Tools and frameworks

HTML, CSS, Git, GitHub, Unix, Django, Rails, Arduino, Laravel, Ajax, PHP, SQL, SQLite, MySQL, Angular, React, JSON.

GENERAL BUSINESS SKILLS

Good presentation skills, Works well in a team, leader, good social skills, smooth-talking sales, entrepreneur, creative.

AWARDS

- Winner of IBM challenge at UNAMxHacks 2019, Major League Hacking national coding competition.
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