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https://github.com/UlmoMacias

#### **EDUCATION**

### Universidad Nacional Autonoma de México, UNAM

Bachelor of Science in Computer Science

Graduating in December 2020

8.4/10

### RESEARCH EXPERIENCE

California, USA

*University of California, San Diego.* 

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

TOGA Soluciones. 2019

Worked with back-end and front-end of a call center web page wich 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 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 'anfitrion' of Universum.

Worked as guide, organizing activities, attending scholar groups.

#### **Cubo21 and CEM organization.**

2018

Math Lecturer.

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

## **MAJOR PROJECTS**

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.

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

Encrypts an image using Less Significant Bit.

# **Shamir Secret Sharing Scheme.**

Encrypts a text using a password.

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

## **SKILLS**

### PROGRAMMING LANGUAGES

3 years: Java.

2 years: Haskell, Python, C, Prolog, JavaScript, C++,

TeX,Ruby,HTML,CSS.

Languages

Advanced English (CAE). Basic German(A1)

### **FRAMEWORKS**

HTML, CSS, Git, GitHub VirtualBox, Unix/Bash, Root Tools on Android, Arduino, Laravel, Ajax, Rails, PHP, SQL, SQLite, MySQL.

### **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.

Nov 2017

Dec 2017