Joseandres Hinojoza Ortuño

 (+ 52 1) 777 513 88 69 ihinojoza@outlook.com **O** github.com/Ualabi linkedin.com/in/jhinojoza

Apr 2015 – Jul 2020

Oct 2018 – Feb 2019

Aug 2018 – Aug 2021

EDUCATION

Mechatronics Engineering (GPA 92/100)

Instituto Politécnico Nacional (IPN), Mexico City.

Academic Exchange (GPA 90/100)

AGH University of Science and Technology, Poland.

Mathematics Bachelor (GPA 82/100)

Universidad Nacional Autónoma de México (UNAM), Mexico City. 30% concluded.

EXPERIENCE

Facebook software engineer internship

I was part of the Jobs team, in the ranking area. I used PHP, Python, Cpp and SQL languages. I made several functions that were added to the ranking model, to improve the recommendations to the users. I worked in remote mode from Mexico City.

Integralidad Gamma Project

The project was about to analyze Mexican federal laws and regulations, to find inconsistencies and errors on them, through the using of natural language processing tools (NLTK, FreeLing and Stanford NLP) on Python 3. As the processing of the base 245 laws were slow in our personal computers, we used the supercomputer of the National Laboratory of Supercomputing of the Southeast of Mexico (LNS) with a connection SSH in terminal (PuTTY). I analyzed the glossaries presented in some laws, to find multiples definitions for the same concept and I applied the cosine similarity to the lemmatized words, to get their proximity between the definitions, and find the concepts that are being defined in multiple ways.

AWARDS AND CONTESTS PARTICIPATIONS

Coding Competitions (Solutions shared in my GitHub)

Over 50 problems solved in Kick Start and Code Jam competitions, best place top 663 in Round H 2020, Achieved to pass to the Round 2 in Facebook Hacker Cup, got the top 1133rd out of 32,699 participants. Python 3, Pypy2 and C++ preferred languages.

Gold medal in the 27th Mexican Mathematical Olympiad (OMM)

Participation in the team of Morelos state in Nov 2013. After it, I participated as volunteer math teacher in the Mexican Mathematic Olympiad. Trained Team Morelos for the Mexican Mathematical Olympiad (OMM) from 2014 to 2020.

PERSONAL PROJECTS

Personal blog (heyualabi.com)

I decided to create my own website to get into the web development, where I will share some sections such as my personal blog, some tutorials, and a coding course in Python. I am using PHP, HTML, CSS, and JS.

Self-balanced binary search tree library in Pipy (pypi.org/project/sbbst/)

I made an implementation of a self-balanced binary search tree (based on the AVL trees) for a coding contest, and as there was not any library to just call the structure, I decided to make it a formal library in Pipy website, so you can install it directly from pip command. It has other functions such as print the tree, and it suits the integers in the way that keeps the tree well explain when printed.

CanSat competitions (CanSat CUCEI / CanSat Competition)

Founder and leader of T'n'T' Team in CanSat Cucei 2019, achieving a successful launch and descending, also to send the data of the satellite's sensors to the ground station, processing all the data with filters and interpreted into useful information to model the behavior of the satellite through its descent. Tracked the position of the satellite with the GPS and modeled its positions in a 3D map using Blender and Python with the surface extracted from Google Maps. Selected in the top 40 of teams in CanSat Competition 2020 to launch in Virginia, but the launch was officially cancelled due to the COVID-19 pandemic.

JOB RELATED SKILLS

Python / Pypy	C / C++ / C#	GNU / Linux	SQL / My SQL	Java
Git	Django	PHP	HTML / CSS	Java Script
Raspberry	LabView	Blender	ATmega	FPGA
Assembly	Statistics	Data Structures	Algorithms	AI Basics
Artificial Vision	3D Design	3D Printers	CanSat	German (A2)

2019 - 2021

2013 - 2020

2020 – Present

2019 – Present

2019 - 2021

2020 – Present

Ago 2021 – Nov 2021