# SOFÍA SALAZAR MAGAÑA

Senior undergraduate student of Genomic Sciences. Interested in Al applications in the analysis of genome data and its harmonization with bioinformatic techniques



# **EDUCATION**

September • 2020 Present

# **B.Sc.**, Genomic Sciences

Escuela Nacional de Estudios Superiores (ENES) Juriquilla, National Autonomous University of Mexico (UNAM)

Querétaro, México

· Grade: 9.88/10

May 2017 May 2020

# **High School Diploma**

Monterrey Institute of Technology and Higher Education (ITESM) Morelia, México

· Grade: 9.69/10



# ☐ RESEARCH EXPERIENCE

September 2023

# **Undergraduate Researcher**

· Hae Kyung Im, PhD

Im Lab, The University of Chicago

• Remotely

- Present
- · Conducted performance testing and workflow assembly for deeplearning software designed to predict genomic features.

January 2022 August 2023

#### **Undergraduate Researcher**

RegGenoLab, International Laboratory for Human Genome Research (LIIGH), National Autonomous University of Mexico (UNAM)

Querétaro, México

- · Alejandra Medina-Rivera, PhD
- · Assembled a bioinformatic pipeline for analysis of RNA-seq data and and conducted differential expression analysis across multiple datasets of Lupus patients and unaffected controls

# CONTACT

- sogusama02@gmail.com
- ♥ ssalazar 02
- github.com/SophSM
- @sophsm.github.io

# **PROGRAMMING** LANGUAGES

Expertise: R and Rstudio, Python, Git, Bash, C++, C#

Familiarity: MySQL, HTML, PHP,

Perl

# LANGUAGES

Spanish - Native English - Proficient French - Intermediate

> Made with the R package pagedown.

The source code is available on github.com/SophSM/CV.

Last updated on 2024-04-15.

# ♣ TEACHING EXPERIENCE

2024

### Guest lecturer at bioinformatics institutional course

Bioinformatic Fridays 2024 course, International Laboratory for Human Genome Research (LIIGH)

Ouerétaro. México

- Two lectures: "Generating diverse graphics on R using ggplot2" & "Data manipulation to create heatmaps on R with ComplexHeatmap"
- · Graduate level class

2023

# Guest lecturer at bioinformatics institutional course

Bioinformatic Fridays 2023 course, International Laboratory for Human Genome Research (LIIGH)

Querétaro, México

- · Lectured on introduction to R lenguage usage for data analysis
- · Undergraduate to graduate level class

2023

# Lecturer at RNA-seq analysis workshop

International Laboratory for Human Genome Research (LIIGH)

Querétaro, México

- · Lectured on RNA-seq analysis workflow using STAR and R
- · Graduate level class

# ♣ TALKS AND POSTERS

February 2024

# Academic Days at LIIGH Symposium 2024

Talk

Querétaro, México

· Studying the Systemic Lupus Erythematosus expression signature and contextualizing it in a Mexican cohort

February 2023

# Academic Days at LIIGH Symposium 2023

Poster

Querétaro, México

· Lupus peripheral blood meta-analysis with Recount3 & Recount3-like processed RNA-seq data

November • 2022

# ISCB-LA SolBio BioNetMX International Conference on Bioinformatics 2022

Poster

Querétaro, México

· Lupus peripheral blood meta-analysis with Recount3 & Recount3-like processed RNA-seg data

# **COURSES** March 2024 February 2024 April 2024 January 2024

# Night Science Workshop: The creative scientific process

International Laboratory for Human Genome Research (LIIGH)

Querétaro, México

· Main instructor: Itai Yanai, PhD

# Intro to AI-driven Science on Supercomputers

Argonne National Laboratory, IL, USA

Online

- · Multiple Instructors
- · Credential ID: a1ff9ac49d6d6754ce667fae36f8ad83f8fe93a5

# Google's Data Analytics Professional Certificate

Google - Coursera

Online

· Credential ID: KEBDX9FHLDSG

#### November • 2022

Workshop: Analysis of biological and biomedical transcriptomic data using Artificial Intelligence (AI) and Machine Learning (ML) methods with R

ISCB-LA SolBio BioNetMX International Conference on Bioinformatics 2022

Querétaro, México

Multiple Instructors

#### January 2022

Introduction to the logical modeling of cellular networks, with applications to cancer and immunology.

International Laboratory for Human Genome Research (LIIGH)

• Querétaro, México

· Main instructor: Denis Thieffry, PhD, (ENS, Paris)

#### November • 2021

# Academic Writing in English course

Escuela Nacional de Estudios Superiores (ENES) Juriquilla, National Autonomous University of Mexico (UNAM)

Querétaro, México

· Main instructor: M.S. José Antonio Alonso-Pavón