

MATIAS RICARDO MENDEZ SANDOVAL

COMPUTATIONAL TECHNOLOGY ENGINEERING STUDENT

EDUCATION

Tecnológico de Monterrey -
Bachelors in Computational
Technology Engineering (2019-
2023)

PROFILE


Passionate programmer willing
to change the world through AI
to help the ones in need.

CONTACT

 matt.sandov@gmail.com

 MY PERSONAL BLOG:
<https://matiasandov.github.io/index.html>

 @matiasandov

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LANGUAGES

- English (fluent) - TOEFL and Pearson certifications
- French (fluent) - C1 DELF certification
- Spanish (native)

PROGRAMMING LANGUAGES

- C++
- Python
- R
- JavaScript
- HTML & CSS
- Matlab
- Swift

EXPERIENCE

- **Instrumedical** *Prototype Researcher Assistant (actual)*

Development of a device to track symptoms and calculate Covid-19 probability in a patient using Arduino, Python and MySQL data base.

- **Lionbridge** *Assistant in Supervised Machine Learning (2020)*

Classifying data from web searcher Bing's queries in Spanish with Pandas library in Python to improve Machine Learning models.

- **Matamoros Jr. High School** *Computer Science Teacher(2018)*

Taught fundamentals of programming with Python to 90 students

HONORS AND AWARDS

- **Santander Scholarship** - Massachussets Institute of Technology (MIT) Leading Digital Transformation (2020)

- **Academic Talent Award** - Tecnológico de Monterrey (2019)

- **Jóvenes en Acción Scholarship** - Embassy of the United States in Mexico (2018)

- **Tec Ambassador** - Tecnológico de Monterrey (2018-2019)

- **1° place** in Chemistry State Competition - UAEM (2016)

- **3° place** in Mathematics State Competition - UAEM (2016)

PROJECTS AND ACTIVITIES

- **CovidApp** contributor to development of a map view app for tracking dangerous Covid-19 zones with JavaScript and HTML.

- **iHealth** contributor to development of Watch OS series 5 App to track down respiratory and heart illnesses with Swift.

- **Personal Blog** programmed in HTML, CSS & JavaScript.

- **HackQuarantine 2020 Hackathon** - HackathonsUK & GitHub

- **CodeForCorona Hackathon** - Singapore National Youth Council.

- **Society of Computer Technologies Engineering** Logistics Role

- **Mechanic Go Kart Project** Winner of the Mechanics Downhill Challenge for High School category, building our own Go Kart.

- **Litros de Ayuda** President of Environmental Club for education, achieving to train 500 students in environmental subject.

1. How were you first introduced to Computer Science? How have you continued to develop your technical skills and seek additional exposure to the field?

My journey in this field started in elementary school. I wanted euphorically to have a **"personal blog"**¹ to share my *Club Penguin's* experiences. So that's when I enrolled in HTML programming. Nowadays, I've enrolled to Machine Learning and Data Science courses to develop personal projects focused mainly on health, such as a **device to detect Covid-19** thanks to the sensors' data, as well as an App to track Covid danger zones (**CovidApp**²).

2. What is your strongest programming language? How much experience do you have using the language? Go into detail about how you used this technical language. If talking about a group project, be specific about your role in the final product.

My strongest programming languages are C++ and Python, however I used them in completely opposite ways. I use C++ for programming Data Structures programs, for example, I developed a program³ using template classes to detect a **"Bot-Net"** through processing a server's access data. Nevertheless, I use Python for Machine Learning and Data Science. As an example, in the Covid-19 device detector, I processed and manipulated the sensors' data using Pandas library, to then build Machine Learning models with LightGBM and SKLearn mainly. As well, I used Pandas library at the Lionbridge internship, manipulating data by choosing and adding new features, categorical data, correcting data leakage, and basically minning the data at a very basic level.

3. Tell us about your background and experiences and how they make you unique.

Growing up as a **gay dark-skinned person** in a racist and homophobic region have got me into severe harmful experiences. Said this, believe me when I say that I want to destine my professional and personal life to make this planet a **fair place**. This is what I bring to the table, a vision to develop software technology with a **purpose**.

4. List the technical courses you will be taking next semester, and please note which programming language(s) will be used, if applicable.

- Implementation of Computational Methods
- Software Construction and Decision Making
- Interconnected Devices

¹ My personal blog (nowadays) <https://matiasandov.github.io/index.html>

² Covid App <https://ctrl-alt-tec.github.io/CovidApp/>

³ BotNet Detector program <https://github.com/matiasandov/CyberAttackF>

5. *List any clubs and/or organizations that you participate in.*

- Society of Computational Engineering Alumni - Council/Logistics(2020)
- Ctrl Alt Tec (Programming Club) - Collaborator (2020)
- Litros de Ayuda (Environmental club) - President of the Club (2019)
- Leadership Club Carnero - Council (2019)