

💌 mario.emilio.j@gmail.com | 🧥 mariojim.github.io | 🞧 github.com/MarioJim | 🛅 linkedin.com/in/mariojim

# **Experience**

#### **Software Engineering Intern**

June - August 2022

GOOGLE Mountain View, CA

- Worked with the Flutter team in their efforts of supporting internal services on new desktop applications
- Implemented a Flutter plugin for storing and uploading logs in first-party desktop Google apps using bidirectional communication through method channels between the plugin API (Dart) and its implementation (Objective-C for MacOS and C++ for Windows)
- Introduced a large scale change (~100 files) in BUILD rules across Google's monorepo in order to improve the dependency check used to verify that Flutter applications correctly import plugins

#### **Software Engineering Intern**

January - March 2022

Мета Remote

- Worked with the Unigraph team (Infra pillar), responsible for managing code size around Meta's products
- Rewrote an algorithm in charge of traversing and topologically sorting a 100,000-node graph using Rust, reducing its execution time from ~18s to ~750ms

## **Software Engineering Intern**

June - August 2021

**MICROSOFT** Remote

- Worked on the Field Service Mobile team from the Dynamics 365 division
- Participated in the creation of a simple feature of the FS app, from its conception, design, documentation, implementation and testing
- Developed and modified TypeScript modules used in React Native applications or in a web context
- Built an audio recording pipeline from recording an audio stream and encoding it using the Android NDK (C++)

#### **Cybersecurity Intern**

January - July 2020

GRUPO FINANCIERO BANORTE

Mexico City, Mexico

- Built and deployed a dashboard to help assess cybersecurity risks that affect the institution in a day-to-day basis
- Created several graph and hierarchy visualizations rendered with the help of React and D3.js
- Developed Python scripts to clean and transform the data from Excel spreadsheets to a variety of JSON and CSV files for easier use in the web app
- Had a hands-on experience on how companies defend their assets against malware and other cyber-threats

#### Education.

#### **B.S. Computer Science and Technology**

Aug 2018 - Exp. Dec 2022

TECNOLÓGICO DE MONTERREY

Mexico

- Currently studying my 9th and last semester, 97/100 GPA
- Relevant coursework: Analysis and Design of Algorithms, Mobile Application Development, Advanced Database Systems, Web Applications Development, Software Design and Architecture, Compiler Design

### Skills\_

**Languages** TypeScript (proficient), Rust, C++, Dart, Java, Python

**Frameworks** React, Flutter, Express, React Native

Mercurial, Git, Docker, GitHub Actions (CI/CD pipelines) **Tools & Platforms** 

# Additional Experience and Awards

## First place in Banorte's Challenge at HackMTY 2019

August 2019

MONTERREY, MEXICO

- Developed an Android app prototype that accurately blocks phishing links and ads
- Competed against about 100 teams in Mexico's largest student hackathon