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### Education

IPN ESCOM - Superior School of Computer Sciences / Bachelor's degree in Computer Systems Engineering Top ranked student for 5 consecutive semesters. Participant of the ACM Student Chapter (better known as "Club de Algoritmia ESCOM") for the last 4 semesters.

August 2016 - May 2021 GPA 92 out of 100

#### UNAM - Faculty of Science / Bachelor's degree in Computer Science

Sophomore, learning about the theoretical part of computer science and especially learning high level math as calculus, number theory, graph theory, set theory and numerical analysis.

August 2017 - Dec. 2021 **GPA 91 out of 100** 

#### IPN CECyT 9 - Center of Scientific and Technological Studies / Technical career in Digital Systems

During my high school years I did a technical career in digital systems where I learned about microcontrollers, digital and analog electronics and low level programming in C and PIC assembly. August 2013 - June 2016 **GPA 87 out of 100** 



## **Projects**

CompilandoConocimiento - Personal education project: Science, math, algorithms, computer science; reference

Since Dec. 2016

- Blog: Creator of a blog (in spanish) to learn about science in general, discrete math, physics, vectorial analysis, simple algorithms and data structures (stacks, queues, BST, AVL trees, etc), automata theory, intro to C and to object oriented programming using Java. The blog has around 100 000 views since the beginning of 2018.
- Books: Author of 6 books in Spanish about the bases of Number theory, Complex analysis, Discrete math, Statistics, Linear algebra and Intro to databases which have been downloaded around 9,000 times.
- Reference: Author of a competitive programming reference website: CompilandoConocimiento.github.io/Reference/

#### TdeTiendita - Point of sale system

May 2018

Creator of a simple point of sale system using React-Flask-MySQL to administer the local business of my family. I develop all the system, from the design of the database to the implementation of the frontend and backend.



# **Work Experience**

## **Software engineering intern** / Facebook Inc.

January 2019 - April 2019, Menlo Park, California, USA

 Working at the Search @ Messenger team in web (front and backend) to create a better search experience around messages and navigation.

#### Web maintainer intern / Faculty of Architecture, UNAM

November 2016 - July 2017, México City

- Maintained, updated and rewrote part of the codebase of the student's website especially redesigning the signup process for classes using MaterializeCSS and JQuery finishing with a more intuitive and modern interface.
- Fixed some rather obvious SQL injections vulnerabilities and rewriting some back-end scripts using PHP.



#### **Awards**

- Participant of the Grant Prize of Mexico (ACM-ICPC) in 2017 and 2018, with the team BrokenSort, finalized in place 91 of 404 teams.
- Third place in the 2018 annual programming contest "Donald Knuth" at Escuela Superior de Cómputo (ESCOM - IPN).
- Student of academic excellence for 5 semesters at ESCOM.
- Google Foobar participant.

# Programming Languages

3 years: modern C++ 11/14/17; C.

#### 2.5 years:

JavaScript (ES2015+), specially around the React ecosystem

#### 1.5 years:

**Java** and **Kotlin** (also basic idea of creating basic android apps). PHP 7 (Hack); Python 3.

6 months: Dart (and the Flutter SDK); MySQL and GraphQL



## **Courses and Certifications**

- Flutter certification by the GDG UNAM (Google Development Group UNAM) from June to July of 2018.
- UNAM Mobile course: Intro to Kotlin for Android development on August 2018.
- DAT208x: Introduction to Python for Data Science learning initiative of Microsoft through edX on Jan 2019.
- B2 English certification by the IPN and KET certification by the Cambridge English Qualifications.



## Technologies I know and love

- HTML5, CSS3, MaterializeCSS, jQuery, Typescript, Flow, React, React Hooks, npm, Webpack, Babel.
- Flutter SDK, Android SDK.
- Git, Mercurial (FB fork), Github, UNIX / Bash, Linux, Flask.
- LaTeX (mainly for math and computer science docs).