

# Oscar Andres Rosas Hernandez - Software engineer

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🌐 Portfolio: SoyOscarRH.github.io

## 🎓 Education

### IPN - Superior School of Computer Sciences / Bachelor's degree in Computer Systems Engineering

Aug 2016 - around May 2021

Student of academic excellence for 6 consecutive semesters Participant of the university ACM Student Chapter (better known as "Club de Algoritmia ESCOM") for the last 5 semesters.

GPA 92 out of 100

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

Aug 2017 - around Dec. 2021

My second bachelor's degree, I focus on learning about the theoretical part of computer science, neural networks and high level math such as number and graph theory and numerical analysis.

GPA 91 out of 100

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

August 2013 - June 2016

During high school I did a technical career in digital systems where I learned about digital and analog electronics, computer networks, microcontrollers and low level programming in assembly and C.

GPA 87 out of 100

## 💼 Work Experience

### Software engineering intern / Facebook Inc.

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

Worked at the "Search @ Messenger" team in web (frontend using JS and ReasonML (React); backend using Hack and GraphQL).

- I created a better search experience by adding "message search" as a first class citizen on the web version of the product.
- I collaborated with 2 other teams on improvements in the navigation of messenger in web following the M4 redesign.

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

November 2016 - July 2017, México City

- Rewrote a section of the student's website (profile, documents, schedules, process to enroll into classes, etc...) using PHP achieving a more maintainable, secure, and documented code base.
- Redesign many parts of the site finishing with a more intuitive and modern interface leading to a better user experience and a lot less confused students at the beginning of each semester.

## 🚀 Projects

### CompilandoConocimiento.com - Personal education project: math, algorithms and computer science

Since Dec. 2016

- **Blog:** Creator of a blog (in spanish) about discrete math, physics, vectorial analysis, algorithms and data structures, automata theory, intro to C and to POO using Java. The blog has around 150 000 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 an intro to relational databases which have been downloaded around 9,000 times.
- **Reference:** Author of a competitive programming reference website.

### TdeTiendita - Point of sale system

Creator of a point of sale system to administer the grocery store of my family. I designed the database structure; develop in Python / Flask all the back end services, taught myself React and created a nice frontend for the system.

May 2018

## 🏆 Leadership and Awards

- **Speaker at Talend Land 2019:** Workshop Intro to React
- **Student of academic excellence** for 6 semesters at ESCOM
- **Third place in the 2018 annual programming contest** "Donald Knuth" at Escuela Superior de Cómputo (ESCOM - IPN).
- **Participant of the Grand Prize of Mexico (ACM-ICPC) in 2017 and 2018**, with the team *BrokenSort*, finalized in place 91 of 404 teams (in 2018).
- **Google Foobar** participant.

## 💻 Programming Languages

**3 years (advance):**

**JavaScript** (ES2015+), specially around the **React** ecosystem.

**2 years:** modern **C++** 11/14/17; **C**.

**1.5 years (medium):** **Python 3** (and Flask); **MySQL**; **PHP 7** (and Hack).

**6 months:** **Dart** (and the Flutter SDK); **Java** and **Kotlin** (also basic idea of creating basic android apps).

**3 months (beginner):** **Scilab**, **Haskell**, **ReasonML**, **GraphQL**



## Courses and Certifications

- **DAT208x:** Introduction to Python for Data Science learning initiative of **Microsoft** through **edX** on Jan 2019.
- **Deep Learning** summer camp - **CVICom UNAM** 2019.
- **Flutter SDK certification by the GDG UNAM** (Google Development Group) from June to July of 2018.
- **Kotlin for Android - UNAM Mobile** on Aug 2018.
- **B2 English certification** by the IPN and KET certification by the Cambridge English Qualifications.
- Participant in the 3rd (in UPIICSA 2018) and 4th (in ESCOM 2019) **IPN Competitive Programming summer camp**.



## Technologies I know and love

- Flutter SDK, Android SDK.
- Git, Mercurial (FB fork), Github, Bash, Linux.
- HTML5, CSS3, jQuery, react, materialize, typescript, flow, babel, npm, webpack.
- LaTeX (mainly for math and computer science docs).