

Oscar Andrés Rosas Hernandez

✉ SoyOscarRH@ciencias.unam.mx

@CompilandoConocimiento

+52 1 55 33 45 66 22

✉ SoyOscarRH@gmail.com

@SoyOscarRH

SoyOscarRH.github.io

Education

IPN - Escuela Superior de Cómputo / Bachelor's degree in Computer Systems Engineering

August 2016 - May 2020

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.

GPA 92 out of 100

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

August 2017 - December 2022

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.

GPA 92 out of 100

IPN - CECyT 9 / Technical career in Digital Systems

August 2013 - June 2016

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.

GPA 87 out of 100

Projects

CompilandoConocimiento.com - Personal education project: blog and algorithms reference

Since December 2016

Creator of a blog about discrete **math, physics and algorithms**, the project has **around 50 000 views** this year.

- Topics range from explanation posts, implementation of basic data structures (stacks, queues, AVL trees, etc), automata theory, introduction to C and to object oriented programming using Java.
- 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 8,000 times.
- 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, specifically around the UI and adding basic new features that are already at other Facebook products.

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.

Programming Languages

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

1.5 years:

JavaScript (ES2015+), specially around the React ecosystem

Java and **Kotlin** (also basic idea of creating basic android apps).

PHP 7; **Python 3**.

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

Technologies

HTML5, CSS3, MaterializeCSS, Typescript, jQuery.

React, NodeJS and npm, Webpack, Babel, Flutter SDK, Android SDK.

Github, UNIX / Bash, Linux, MySQL, Flask.

LaTeX (mainly for math and computer science docs)

Courses and Certifications

- Participant of the **Grant Prize of Mexico ACP-IPC 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 University)
- **Student of Academic Excellence** for 5 semesters at ESCOM
- **Google Foobar** participant

- **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
- **B2 English certification** by the Instituto Politécnico Nacional and KET certification by the Cambridge English Qualifications.

Awards