# Oscar Andres Rosas Hernandez - Software engineer

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Portfolio: SoyOscarRH.github.io

@CompilandoConocimiento

in @SoyOscarRH



### Education

Computers Systems Engineer, B.S. | Superior School of Computer Sciences (ESCOM, IPN) Student of academic excellence for the last 4 years. Organizer and teacher of my university ACM Student Chapter / algorithm club. Main teacher of the React course at my college's Web Development Club.

Aug 2016 - Jan. 2022 CGPA: 92 out of 100 (3.66)

Computer Science, B.S. | School of Sciences (Facultad de Ciencias, UNAM)

Relevant courses: Cryptography, parallel computing, neural networks, machine learning, probability, number and graph theory, numerical analysis and, data structures and algorithms.

Aug 2017 - Dec. 2022 CGPA: 93 out of 100 (3.73)

Digital Systems, Technical track | Center of Scientific and Technological Studies #9 (IPN) During high school I did a technical career focused in analog and digital systems, electronics, and microcontrollers.

Aug 2013 - June 2016 CGPA: 87 out of 100 (3.48)



### **Experience**

Software Engineer Intern | Facebook Inc. (Facebook Gaming) 🗷 June - Aug 2020, Remote work | Team at Seattle Office Worked on the "Games Machine Learning" team (frontend with JavaScript (React); backend with Hack, Python, and GraphOL).

- Improved the chaining experience on fb.gg thanks to A/B testing on the architecture that generates the "Up Next" videos.
- Created a logging system and the first recommendation machine learning models used in the main page of Facebook Gaming.

Software Engineer Intern | Facebook Inc. (Messenger)

January - April 2019, Menlo Park, California

Worked on the "Search @ Messenger" team (frontend with JavaScript and ReasonML (React); backend using Hack and GraphQL).

- Created a better search experience by adding the ability to search for messages from the general search bar on messager web.
- Collaborated with other 2 teams to improve navigation through different screens on messenger web following the M4 redesign.

Web Maintainer Intern | Faculty of Architecture, UNAM

November 2016 - July 2017, Mexico City

Redesign the student's website using material design leading to a 35% reduction on cases of student lost on the inscription process.



### **Projects**

CompilandoConocimiento.com & - Personal project: Math, algorithms and computer science

Dec. 2016 - Present

- Blog: Creator of a blog about math, theoretical computer science, and algorithms & data structures (300K views)
- Books: Author of mini books in number theory, databases, discrete math, statistics, linear algebra, and complex analysis (8k views)
- Reference: Part of a team effort; a competitive programming reference website 🗗 and code repository 🖸

TdeTiendita 🗹 - Point of sale system

Jan. 2018 - May 2018

Did it for my family grocery store. Created the backend services in Python / Flask, and taught myself React to create a nice frontend for it:D

For a list with +20 projects that I really feel proud of visit my portfolio: SoyOscarRH.github.io/projects &



# **Leadership and awards**

- Speaker at Talend Land 2019: Intro to React (Workshop)
- 1st place in the 2019 Microsoft Chatbot Hackathon @ ESCOM
- 30 out of 400 in the Grand Prize of Mexico 2019 (ACM ICPC)
- 3rd place in the 2018 programming contest "Donald Knuth"
- Google Foobar participant , Google Code Jam and KickStart
- Organizer and teacher of my university ACM Student Chapter: algorithm club with over +70 active members each semester
- Teacher of the Intro to React course at the web club



### **Programming languages**

#### 4 years (advanced):

JavaScript (ES2015+); special focus on frontend with React

#### 3 years:

Modern C++ 11/14/17; mainly for competitive programming

### 1.5 years (proficient):

Python 3 (and Flask); PHP 7 (and Hack); SQL Java and Kotlin (and a basic idea of creating apps) Dart 2 (and the Flutter SDK for creating cross platform apps)

#### 3 months (beginner):

ReasonML, GraphQL, Rust, Common Lisp, Haskell

## Courses and experience

- Google Software Product Sprint: virtual, invite only program that brings together top university students across North America and Googlers for 11 weeks to design and build web apps, gain applied data structure and algorithms skills, and receive tailored career development resources
- Platzi student (+30 courses) in web, programming languages and software development in general
- Wallbreakers software engineering apprenticeship
- Deep Learning summer camp at CVICom UNAM 🗹
- Intro to Deep Learning with PyTorch at Udacity
- Flutter SDK certification by the GDG UNAM (Google 🖸 🖸 Development Group) and Kotlin for Android - UNAM Mobile
- Participant in many competitive programming summer camps, in UPIICSA, ESCOM and CIMAT [7]
- B2 English certification by IPN and KET certification



### Technologies I know and love

- Linux; git, github, mercurial (fb fork); latex; mysql
- Flutter, react native; html5, css3, materialize; react, svelte; typescript, flow, webpack
- Tensorflow, pytorch