

Oscar Andres Rosas Hernandez - Software engineer

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🌐 Portfolio: SoyOscarRH.github.io

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EDUCATION

Computers Systems Engineer, B.S. | Superior School of Computer Sciences (ESCOM, IPN) [🔗](#)
Student of academic excellence for the last 5 years. Organizer and teacher of my university ACM Student Chapter / algorithm and interviews club. Teacher of the ReactJS course at my college's Web Dev Club.

Aug 2016 - Feb. 2022
CGPA: **91** out of 100 (3.64/4)

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: **92** out of 100 (3.68/4)

Digital Systems, Technical Degree | Center of Scientific and Technological Studies #9 (IPN) [🔗](#)

Did it during high school; focused on analog and digital systems, electronics, and the use of microcontrollers.

Aug 2013 - June 2016
CGPA: **87** out of 100 (3.48/4)

EXPERIENCE

Software Engineer and Data Science, Intern | Microsoft Inc. (Azure Data R&D) [🔗](#) May - Aug 2021, Remote | Team at Seattle Office
Collaborator on "ORCAS (Open Source Azure databases) differentiation" team (Python, and SQL).

- Researched about the SOTA (State of the Art) in Text2SQL: Transforming natural language question into SQL
- Added the capability to use OFFSET to SmBop; created new data points: SQL queries by grammar expansion and back translation

Software Engineer, Intern | Facebook Inc. (Facebook Gaming) [🔗](#)

June - Aug 2020, Remote | Team at Seattle Office

Collaborator on "Games Machine Learning" team (JavaScript; GraphQL, Hack, Python, and SQL).

- Improved the chaining experience on fb.gg thanks to A/B testing on the architecture that generates the "Up Next" videos.
- Enhance the recommendations at the endscreen of all gaming videos and the logging system used all over facebook.com/gaming.

Software Engineer, Intern | Facebook Inc. (Messenger) [🔗](#)

January - April 2019, Menlo Park, California

Collaborator on "Search @ Messenger" team (JavaScript and ReasonML; Hack and GraphQL). Features are used by tens of millions of users each week.

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

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 to help college students (350K views)
- **Books:** Author of free mini books in number theory, databases, discrete math, statistics, linear algebra, and complex analysis (10k reads) [🔗](#)
- **Reference:** Main collaborator of a competitive programming reference website [🔗](#) and code repository [🔗](#)

For a list with +20 projects that I really feel proud please 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 helping +100 students each semester. [🔗](#)
Speaker and mock interviewer of Nutria Sub-Interview Club
- **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 APPRENTICESHIPS

- **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 [🔗](#)
- **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