Oscar Andres Rosas Hernandez - Software engineer

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🌐 **Portfolio:** SoyOscarRH.github.io   ⬤ **@CompilandoConocimiento**   in **@SoyOscarRH**

EXPERIENCE

Software Engineer and Data Science, Intern | Microsoft Inc. (Azure Data R&D)   *May - Aug **2021**, **Remote** | Team at Seattle Office*
Member of the **ORCAS differentiation (Open Source Azure databases) team**; worked with **Python**, and **SQL**.
- Researched about the State of the Art of **Text2SQL**: The task of transforming natural language questions into SQL queries.
- Added the capability to use OFFSET in **SmBop**. Created new data points: SQL queries via grammar expansion + back translation.

Software Engineer, Intern | Meta Inc. (previously Facebook Inc.)
Used **JavaScript** and **ReScript**, focused in the **React / React Native** ecosystem; **GraphQL** using Relay**, Hack**, **Python**, and **SQL.**

"Conversational Commerce" team at Novi / Facebook Financial   *Sept - Dec **2021**, **Remote** | Team at Menlo Park Office*
- Improved Messenger Orders product by adding images to orders; and showing the as buyer/seller in mobile and web platforms.
- Enhance the design and functionality of the Order Details screen on mobile and in web.

"Games Machine Learning" team at Facebook Gaming   *June - Aug **2020**, **Remote** | Team at Seattle Office*
- Improved the video chaining experience of fb.gg via A/B testing the backend 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*.

"Search @ Messenger" team at Messenger   *January - April **2019**, **Menlo Park**, California, US*
- 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*.

EDUCATION

Computers Systems Engineering, B.S. | Superior School of Computer Sciences (ESCOM IPN) ⤴   Aug **2016** - Jan **2022**
CGPA: 91 out of **100** (3.6/4)
Member of the academic excellence program. Undergrad thesis - final project was Image2Circuit:
transform images of schematics using deep learning into a netlist -> png representation + simulation file.

Computer Science, B.S. | School of Sciences (Facultad de Ciencias UNAM) ⤴   Aug **2017** - Dec **2022**
CGPA: 92 out of **100** (3.7/4)
Relevant courses like cryptography, parallel computing, neural networks, probability, and numerical analysis.

Digital Systems, Technical Degree | Center of Scientific and Technological Studies #9 (CECyT 9 IPN) ⤴   Aug **2013** - June **2016**
CGPA: 87 out of **100** (3.5/4)
Did it during high school; focused on analog and digital systems, electronics, and the use of microcontrollers.

PROJECTS

CompilandoConocimiento.com | Personal project about math, algorithms and computer science ⤴   *Dec. 2016 – Present*
- **Blog:** Topics ranges from *math, theoretical computer science, algorithms and data structures* to help college students **(600K views)**
- **Books:** Author of free 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 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)** ⤴
- **Google Foobar** participant ⤴**, Google Code Jam** and **KickStart**
- **Organizer and teacher** of my university **ACM Student Chapter / algorithm club** helping *+100 students* each semester ⤴
- **Organizer** and **mock interviewer** of *Nutria Interview Club* ⤴
- **Teacher** of the **Intro to React** course at the web club ⤴

PROGRAMMING LANGUAGES

5 years (advanced):
JavaScript (ES2015+) special focus on frontend with React

4 years:
Modern **C++** 11/14/17 mainly for competitive programming

1.5 years (proficient):
Python 3; **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):
Rust, GraphQL, ReScript, Common Lisp, Haskell

COURSES AND APPRENTICESHIPS

- **Google Software Product Sprint:** virtual, invite only program that brings 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**, including UPIICSA, ESCOM and CIMAT ⤴
- **B2 English certification** by IPN and KET certification

TECHNOLOGIES I KNOW AND LOVE

- Flutter
- React Native
- CSS ecosystem
- React and Svelte
- TypeScript and Flow
- Git and GitHub
- Mercurial - FB fork
- Linux and LaTeX
- MySQL
- PostgreSQL
- TensorFlow
- PyTorch