### Oscar Andres Rosas Hernandez - Software engineer

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#### Education

Superior School of Computer Sciences (ESCOM), National Polytechnic Institute (IPN) Bachelor's degree in Computers Systems Engineer

Participant and teacher assistant (~40 students) of my university ACM Student Chapter /

Aug 2016 - Graduating around Dec. 2021 GPA 91 out of 100 (3.64)

algorithms club for the last 2 years. Student of academic excellence for 7 consecutive semesters.

Aug 2017 - Graduating around Dec. 2021 GPA 92 out of 100 (3.68)

School of Sciences, UNAM / Bachelor's degree in Computer Science My second degree, I focus here on learning about the theoretical part of computer science as

neural networks and high level math such as number, graph theory and numerical analysis. Center of Scientific and Technological Studies #9, IPN / Technical career in Digital Systems 🗗

During high school I did a technical career where learned about digital and analog electronics and microcontrollers.

August 2013 - June 2016

GPA 87 out of 100 (3.48)

# Work Experience

### Software engineer intern / Facebook Inc. 🗷

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

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

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

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

November 2016 - July 2017, México City

Rewrote and redesign a section of the student's website (profile, schedules, process to enroll into classes, etc...) using vanilla PHP and Materialize achieving a more maintainable and documented code base; also a more intuitive and modern interface leading to a better user experience measured by a reduction (~40%) of students confused with the process at the beginning of the semester.



## **Personal Projects**

CompilandoConocimiento.com 🗗 - Education project: Math, algorithms and computer science 💗

Dec. 2016 - Present

- Blog: Creator of a blog (in spanish) about discrete math, algorithms and data structures, automata theory, intro to C and to POO using Java, physics and vectorial analysis. The blog has around 250,000 views since the beginning of 2018.
- Books: Author of 6 books in spanish about the bases of number theory, intro to relational databases, discrete math, statistics, linear algebra, complex analysis, and an which have been downloaded around 10,000 times.
- Reference: Part of a team effort; a competitive programming reference website 🔀 and code repository 🔀

TdeTiendita - Point of sale system

Co Creator of a point of sale system to administer the grocery store of my family. I helped with the design of the database structure; developed the backend services in Python/Flask and taught myself React to create a nice frontend for the system. May 2018



# **Leadership and Awards**

- Speaker at Talend Land 2019: Intro to React [Workshop]
- Winner of the 2019 Microsoft Chatbot Hackathon at ESCOM
- Participant of the Grand Prize of Mexico (ACM ICPC) with the team ANSIosos (place 30 of 381 teams) in 2019 and in 2018 with BrokenSort (91 of 394 teams)
- Third place in the 2018 annual programming contest "Donald Knuth" at ESCOM 🛭 🗗
- Google Foobar participant



#### **Programming Languages**

3 years (advance):

JavaScript (ES2015+), distinctively around the React ecosystem

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

1.5 years (medium):

Python 3 (and Flask); MySQL; PHP 7 (and Hack)

Dart 2 (and the Flutter SDK)

Java and Kotlin (and a basic idea of creating apps)

3 months (beginner):

Haskell, Common Lisp, ReasonML, GraphQL



## **Courses and Certifications**

- Deep Learning summer camp at CVICom UNAM 2019 [7]
- Intro to Deep Learning with PyTorch: Facebook through Udacity on Nov 2019 🗗
- Flutter SDK certification by the GDG UNAM (Google Development Group) summer of 2018
- Kotlin for Android UNAM Mobile on Aug 2018
- Participant in the 3rd (in UPIICSA 2018) and 4th (in ESCOM 2019) IPN Competitive Programming summer camp 🗗
- 2nd School of Algorithms: Game Theory at CIMAT
- Platzi student (+20 courses) in web, programming languages and software development in general
- B2 English certification by the IPN and KET certification by the Cambridge English Qualifications



#### Technologies I know and love

- Git, mercurial (FB fork), github, bash, linux.
- html5, css3, iquery, materialize, react, typescript, flow, babel, webpack, react native.
- LaTeX (mainly for math and computer science documents).