

Alan Enrique Ontiveros Salazar

alan-enrique@live.com.mx
alan.enrique.ontiveros.salazar@gmail.com

+52 1 55 60468997

github.com/alaneos777

EDUCATION

Escuela Superior de Cómputo – Instituto Politécnico Nacional
Bachelor of Science in Computer Engineering

Graduating in June 2021
GPA 98.2/100

WORK EXPERIENCE

Microsoft
Software Engineer Intern

- Implemented auto-pause and resume feature for a Serverless SKU in Azure Database for MySQL.
- Worked with a team to have a serverless POC working.
- Developed in C# and C++.

Redmond, WA, USA
June – August 2020

Microsoft
Software Engineer Intern

- Designed an isolation layer to execute user code in python submitted in Spark clusters (through Livy or directly) inside Firecracker microVM's.
- It allows to prevent running malicious code inside the clusters and keep all the processes separated.
- Developed in Scala, Java and Python.

Redmond, WA, USA
June – August 2019

MAJOR PROJECTS

Centro de cálculo
It is a website which serves as a didactic tool to help students and teachers to understand and apply mathematics correctly, through detailed explanations of the subtopics Arithmetic, Algebra and Geometry.

- Designed in HTML5, CSS3 and JavaScript.
- Available at <https://alaneos777.000webhostapp.com/calculo/>

August 2014 – January 2016

Compilers
It is a webapp where we have implemented some basic operations between all the essential elements of a Compiler through its stages: Tokens, Finite State Automatas and Context Free Grammars.

- For automatas, the next operations are available: join, concatenate, closures, convert to deterministic, create basic automata, create from regular expression, lexical analysis, etc.
- For grammars, the available operations are: LL(1), LR(0), LALR(1), LR(1) and Earley parsing, seeing step by step this process (table generation and string parsing).
- Designed using React and Materialize.
- Available at <https://compilandoconocimiento.github.io/Compiler>

September 2018 – September 2019

SKILLS

PROGRAMMING LANGUAGES
4 years: C# .NET, JavaScript, PHP
3 years: C/C++, Java
2 years: SQL
1 year: Python
6 months: Mathematica

TECHNOLOGIES
HTML5, CSS3, JavaScript, Visual Studio, MinGW, MySQL
Workbench, LaTeX, Git.

AWARDS

- Participation in 2019 ICPC Mexico and Central America Finals, 1st place
- Participation in 43rd Annual World Finals ICPC.
- Participation in Moscow Pre-Finals Workshop ICPC 2019.
- Participation in 2018 ICPC Mexico and Central America Finals, 2nd place
- Participation in 3rd summer of competitive programming 2018, hosted by UPIISCA-IPN. 1st place.
- Participation in X Caribbean Training Camp 2018.
- 1st place at EXPO ESCOM math contest, 2017.
- 1st place at ACM-ICPC, in FES Acatlán, 2017.
- Honorific mention at National Math Contest Pierre Fermat 2016.
- Winner at Presea Bernardo Quintana Arrioja, in the category academic excellence, 2016.
- Winner at Expociencias nacional 2015 with the project Centro de cálculo.
- 2nd place at National Math Contest Pierre Fermat 2015.
- 3rd place at XI Math Olympiad Joseph Louis Lagrange, 2015.
- Silver Medal at National Olympiad in Informatics in Mexico, 2015.
- 1st place at Interpolitécnico Geometría y trigonometría 2014.
- Honorific mention at National Math Contest Pierre Fermat 2013.

CERTIFICATIONS

- Microsoft Office Specialist Word 2007
- Microsoft Office Specialist Excel 2007
- Microsoft Office Specialist PowerPoint 2007
- Trinity College London, grade 2 A1
- Trinity College London, grade 3 A2.1