

EDUCATION

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

Graduating in: December 2021
 GPA: 9.02 out of 10

E.T.S Ingeniería Informática - Universidad Politécnica de Valencia, Spain
Exchange program student PROMOE 2019-2020.

Start date: September 2019
Finish date: February 2020

Enrolled in Artificial Intelligent subjects like Data Mining, Machine Learning and others related with Cryptography and Distributed Systems.

WORK EXPERIENCE

Banco de México

Intern at General Department of Economic Research (DGIE).

Start date: March 2020
 End date: September 2020

- Data Engineer's intern-assistant whose main tasks were: Integration data, data collections, data cleaning and data preparation for ETL using Pentaho, SQL and Pyramid.

Banco de México

Systems Analyst at General Department of Economic Research (DGIE).

Start date: November 2020.
 End date: Now

- Responsible for data extraction, transformations and data loading using the ETL tool Pentaho Kettle. Development of queries, tables and views using Oracle 11g. Design and development of Cubes in Analysis Services and dashboard visualization using Pyramid.

MAJOR PROJECTS

Robot Agency

Final Project for the Design and Application of Distributed System subject by 1 person
Distributed System using Java implementing a CORBA architecture.

Fall
 2019

- Responsible by analysis, design and development of a robot simulator graphical interface using the Java. The purpose of this project was to reach an objective within a scenario with obstacles, avoiding collapsing with them. Using a robot group manager that allows registration, fault tolerance, robot removal, tracking and monitoring using CORBA distributed objects.

Travel System Agency.

Final Project to the Data Base subject.

2020

- Design and implementing of the normalized (3NF) data base using MySQL with Work Bench tool for the model
- Responsible for the back-end and front-end functionality for the modules of: log-in, sign-up, administrator interface, credit-card verification (very basic), main and trip reservation screens, using JFrame and JDBC Java libraries.

ESCOMIPS: 16-bits microprocessor en VHDL.

Final Project for the Computer Architecture subject developed by 2 people.

Spring
 2019

Design of the microprocessor using a RISC architecture and development of the microprocessor microinstructions.

- Team-working to the development of the modules: Control Unit, Stack, Program Memory, Log File, Data Memory, Arithmetic-Logical Unit (ALU), Sign and Address Extenders, which make up the microprocessor.
- Implementation of the microprocessor on the Artix 7 board (XC7A100T-2CSG324) and simulation of Bubble Sorting.

Personal Repository of Competitive Programming Codes.

Accepted solutions for programming problems of different topics on various platforms and judges.

2017-
 2019

- Implementation of data structures and selected topics learned on Algorithmic Club at [ESCOM](#).

SKILLS AND TECHNOLOGIES

PROGRAMMING LANGUAGES

Java	1.5 years	C/C++	1 year
Python	1 year	JavaScript	1 year



AWARDS

Creation of Youtube Channel "Dile al Kai"	2020
Exchange student in PROMOE program.	2020
DEV FEST Participant in Valencia by Google.	2019
Member of 1st generation Santander-EMTECH Impulsa	2019
Algorithmic Club Member at ESCOM-IPN	2018-2019
ACM-ICPC Student Chapter Member	2018-2019
Chess Club Member at ESCOM-IPN	2018-2019
Member of Academic Excellence Program at ESCOM	2016-2019
Participant of Grand Prize of Mexico ACM-ICPC	2018
Staff Leader in the Regional Mexico and Central America ACM-ICPC by ESCOM-IPN.	2016

TECHNOLOGIES

HTML, MySQL, CSS, UML, XML, Pentaho, StarUML, Node js, LaTeX, MS Office, Mathematica, RapidMiner, Power BI, Octave, Matlab.



ON-SITE COURSES

Oracle Certified Associated Java SE 8 Fundamentals OCA Course by Certificatic at Escuela Superior de Cómputo in august 2016.



ONLINE COURSES AND CERTIFICATIONS

- [PCEP \[PCEP-30-01\]](#) - Certified Entry-Level Python Programmer in March 2021
- Nanodegree in Machine Learning by Udacity online platform in September 2019.
- [Neural Networks and Deep Learning](#) by deeplearning.ai and Coursera online platform in August 2020.
- [Analyzing Data with Python](#) by IBM and edX online platform in June 2020.