Daniel Sánchez Domínguez

Software Engineer

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PROFESSIONAL EXPERIENCE

07.Jun.2023 Rust Trainer in a Workshop at Univ. Iberoamericana

Conducted a workshop targeting developers interested in learning Rust and

writing smart contracts with Ink!.

Freelancing projects

Currently working to develop a basic cybersecurity toolchain (a Fuzzer and Static Analyzer) for analyzing vulnerabilities in WASM binaries used in

Ink! smart contracts. Utilizing Rust for the implementation.

15.Jan.2022 19.Dec.2022 - John Deere Embedded Systems Engineer

Worked in an Agile team using Linux, Python, C, and ARM. Accomplishments include designing and implementing a kernel driver for communication between a processor and a microprocessor through UART and the IOP protocol, developing a Python CLI app for booting only USBs with verified ISO images in Windows, resolved build issues in Jenkins, and implementing a module in RTOS to convert CAN to Bluetooth. Also taught a series of courses on Rust and its application in embedded systems to engineers on

 $the\ organization.$

Summer 2022 ABC Logistica Web Developer

Contracted to document and implement tests in PHP using the Laravel

framework. Worked with languages like SQL and JavaScript.

EDUCATION

Apr.2023 - ...

Jan.2023-Feb.2023 Polkadot Blockchain Academy : Parity x UBA (Argentina)

An in deepth course, research oriented, working with core libraries of the

Substrate framework in Rust

 $\textbf{2018-2022} \hspace{1.5cm} \textbf{ Winiversity studies as Network Engineer}: \textbf{UANL} \hspace{0.1cm} (\textbf{Mexico})$

Focused on sistems programming and embedded development

Autumn 2020 - The Coding School's Qubit by Qubit : IBM

 $Completed\ a\ two-semester\ Quantum\ Computing\ course\ using\ the\ \textbf{\textit{Qiskit}}$

framework

Spring 2022 Plutus Pioneers 3rd Cohort : IOHK

Completed a hands-on course using **Haskell** to learn about the Cardano Blockchain and Smart Contracts development.

ACADEMIC ACTIVITIES

10-22.Nov.2020 iGEM Competition Gold mendal as member of the FCB-UANL team

Modification of a bacterium for the expression of ranaspumins, a thermo-

resistant protein, for producing fire-fighting foam.

Summer 2020 X Escuela de Verano Virtual de Matemáticas organized by the UNAM

Focus on numerical methods to model pandemic dynamics using Python 01-04.Nov.2019 iGEM Competition Bronze medal as member of the UANL team Designed genetically engineered bacteria for digesting toxic compounds. Used Python for numerical simulations and cluster computing. Created an online wiki to document the project. Presented the project at the iGEM competition in Boston, USA. Autumn 2019 Túnel de la biología sintética Scientific divulgation activity Program: CON-CIENCIA UANL Participation as organizer Autumn 2019 Program to promote STEM skills aimed at low-income high school students. Conducted a course on programming concepts and digital electronics. 04-20.Sep.2019 Course: Biotecnología de Cianobacterias y Microalgas: FCB-UANL Hands-on workshop given by MSc. Alejandra Torres Ariño, aimed to learn how to extract microalgae, cultivate cyanobacteria and count organisms under a microscope. Course: Biotecnología Aplicada a Biomedicina Molecular : CIDEB-UANL Summer 2019 Hands-on course given by MSc. Heber Torres Cordero, to learn DNA extraction techniques, protein purification, and identification of diseases through molecular techniques. Olimpiada del Conocimiento organized by the UANL: 3rd place Feb.2019 Sep.2017 Festival Internacional y Masterclass de Piano : UANL Participation as pianist interpeter Jul.2017 2º Concurso Nacional de Piano: Universidad de Guadalajara Concurso Nacional de Jóvenes Pianistas Parnassós on the Fourth Level 30.01.2015

SKILLS AND QUALIFICATIONS

Languages

 $egin{array}{ll} Native \ tongue & {
m Spanish} \\ C1 & {
m English} \\ A2 & {
m French} \\ \end{array}$

Programming Languages

Advanced
Advanced
Proeficient

LINKS OF INTEREST

Github DanEscher98

In LinkedIn Danyiel Colin

Dev. to Technical blog

GEM project iGEM UANL 2019

GEM project iGEM FCB-UANL 2020

Workshop Youtube Rust Workshop in Spanish