

# FIDEL SANCHEZ-BUENO

## Full-stack & web3 Developer

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📍 Punto Fijo, Venezuela.

🌐 https://espanicon.team

### EDUCATION

- B.S. Chemical Engineering  
2004 - 2011. UNEFM. Venezuela

### SKILLS:

- |                          |                                        |
|--------------------------|----------------------------------------|
| • Front-End:             | • Misc:                                |
| ◦ Javascript, HTML & CSS | ◦ Python (moderate)                    |
| ◦ ReactJS                | ◦ AWS, bare metal<br>servers, hetzner. |
| ◦ NextJS                 |                                        |
| • Back-End:              | ◦ PoS nodes                            |
| ◦ NodeJS                 | ◦ Blockchain, web3                     |
| ◦ MongoDB                | ◦ Linux power user                     |
| ◦ mongooseJS             | ◦ Docker                               |
| ◦ ExpressJS              | ◦ NGINX                                |

### LANGUAGES

- Spanish (Native)
- English (Full proficiency. IELTS 7.5/9 - CEFR C1)

## Summary

Graduated in **Chemical Engineering**, I'm a **Software Developer** with experience in **web development** (both frontend and backend), currently focused on **web3** and **blockchain** related projects. I have experience maintaining and setting up **PoS** nodes on **Linux** servers, I'm very comfortable working on Linux environments. I have been a linux power user for about 15 years, I'm very familiar with docker, SSH, the linux terminal and linux systems overall, etc.

## Experience

### Project Lead.

*Espanicon (ICON Network validator)*

2018 - Present

Espanicon is a project created to build blockchain based solutions in the ICON Network as well as run a node validator in its PoS chain.

- Remote administration of servers running validator nodes on mainnet and testnets, and RPC API nodes.
- Created several articles documenting technical specifications regarding the ICON Network ecosystem.
- Submitted improvements on specification for the network.
- Developed several projects focused on web3, NFT gaming, node monitoring, etc.

### Web Developer (Full-stack).

*Freelance - remote.*

2016 - Present

Worked on several projects related to front-end and back-end development using technologies such as Javascript, NodeJS and MongoDB.

- Developed web applications with ReactJS and NextJS.

- Created REST API servers with nodeJS and ExpressJS.
- Developed and managed databases with MongoDB and mongooseJS.

## Web3 Developer.

*Freelance - remote.*

2020 - Present

Developed web applications that communicate and interact with blockchain networks, allowing users to login using blockchain wallets, interacted with smart contracts on the ICON Network fetching wallet information data, transactions data, signing transactions for token transfers and specific interactions with smart contracts that required wallet signing.

## Projects

### *Node Butler (web3 application for PoS node management)*

- Website: <https://butler.espanicon.team/>
- Project proposal: <https://forum.icon.community/t/node-butler-icon-node-monitor-tools-to-simplify-node-management-and-monitoring/2778/7>
- Github:
  - Backend: <https://github.com/Espanicon/node-butler-backend>
  - Frontend: <https://github.com/Espanicon/node-butler-frontend>

Node butler is a web app that allow validators to login using any ICON wallet that implements the ICON JS Provider API (currently ICONex and Hana) or any supported Ledger device, to allow management of on-chain node related tasks like adding bonds, updating node data, signing tx methods, voting on network proposals and more it will also show detailed information about the node.

### *ICON-Node-Monitor (telegram bot for PoS node monitoring)*

- Website: Telegram bot.
- Project proposal: <https://forum.icon.community/t/node-butler-icon-node-monitor-tools-to-simplify-node-management-and-monitoring/2778/7>
- Github: <https://github.com/Espanicon/icon-node-monitor>

Icon-node-monitor is a bot intended to keep track of the status of a node (or list of nodes) in the ICON Network. The bot allows for a user to be the bot admin and has a lock/unlock state, if the bot is locked only the bot admin is allow to modify certain configurations (add/remove nodes to be monitored and users to the report list) and run certain commands (i.e stopping and starting the version check for the nodes).

### *SuperNode Racing (Marketplace)*

- Website: upcoming
- Project Discussion: <https://forum.icon.community/t/supernode-racing-cps-proposal/2129>

SuperNode Racing is an upcoming NFT Racing game being built in the ICON Network. For this project I have developed the marketplace that will allow users to buy/sell and auction NFT items related to the game. The following are key details to summarize the development of this project:

- Marketplace web page built using ReactJs. As a new project I was able to optimize the web page using the latest industry recommendations and updates regarding React, mainly in the use of functional components, hooks and state management without using external libraries.
- Web3 elements. To allow user interaction with the ICON blockchain a library for communication between the frontend and the ICON blockchain was developed enabling the possibility to safely sign transactions without exposing users private keys by connecting with native wallets in the ICON ecosystem.

## ***Espanicon SDK (JS based SDK for the ICON Network)***

- Website: <https://github.com/Espanicon/espanicon-sdk>

Espanicon SDK is a custom JS SDK for the ICON Network created specifically to be used in Espanicon projects related to development in the ICON Network. The benefit of using the Espanicon SDK is a more simpler syntax to make very common read-only queries to the ICON Network, and the methods for signed transactions returns a JSON object (ICON JSON-RPC) that can be given to any ICON wallet that implements the JS Provider standard (currently ICONex and Hana) and this will allow the signed transactions to be handled securely with the wallets without the need to expose the private keys.

## ***Balanced-PNL (Telegram bot)***

- Website: <https://github.com/Espanicon/Balanced-PNL>

BalancedPNL is a bot intended to keep track of a wallet position on the [Balanced Network](#). The bot gets your wallet debt on the platform and compares that debt to the value of all the tokens in the wallet to calculate a PNL.

## ***ICON-Login (Web3 React component)***

- Website: <https://github.com/Espanicon/ICON-Login>

ICON-login is a react component that allows for user login based on ICON wallet addresses. It supports login via ICONex /Hana wallets and ledger devices.

# **Technical Development and Technical Writing**

Open source collaborations is a primary focus in my professional development, because of this I have collaborated with open source projects in several ways one of which has been creating and submitting improvement proposals for technical aspects of the projects.

## ***ICON Network Improvement Proposal: IIP-48***

- Proposal: <https://github.com/icon-project/IIPs/blob/master/IIPS/iip-48.md>

- Project Discussion: <https://forum.icon.community/t/creating-a-standard-for-the-bip44-path-derivation-of-icon-addresses-discussion/2702/6>

Creation of a standard for the BIP44 coin\_type and derivation paths for ICON wallets to allow for compatibility for wallet generation based on mnemonic seeds across the ICON ecosystem. The benefit of this are the following:

- Allow backup compatibility between wallets that generate addresses based on mnemonic seeds.
- Create a seamless user experience in web apps that allow for users to login or sign transactions with ledger devices or any other Hierarchical Deterministic wallet.

## ***ICON Network Improvement Proposal: IIP-49 (pending approval)***

- Proposal: <https://github.com/icon-project/IIPs/pull/49>
- Project Discussion: <https://forum.icon.community/t/creating-a-spec-in-the-iip-for-an-icon-provider-js-api-and-bip44-coin-type-and-path-derivation-discussion/2700/1>

Documentation and creation of a network standard for the ICON Provider JS API That allows communication between software wallets and web applications.

## ***ICON In Numbers (2020 - 2021)***

- Articles: <https://medium.com/@espanicon>

**ICON In Numbers** was a collaboration project that ran for 42 issues with the goal to analyze relevant on-chain data in the ICON Blockchain related to transactions, staking, voting and governance in general, it analyzed trends on a bi weekly basis to report and publish interesting data regarding these topics to show a distinct and interesting picture of the activity in the chain and allow users of the ICON Ecosystem make informed decisions on how to vote and stake.

## ***Dev.to Technical Articles.***

- Articles: <https://dev.to/espanicon>