# Johanna Josephine

Software Engineer

## **Experience**

Full-stack / Web3 developer //MERN stack

@Simple Breakthrough LLC

Apr 2021-Present

- •Lead a team of 3-4 developers and conducted code reviews
- Designed, implemented and tested smart contracts
- End to end implementation of websites(backend, frontend, web3) from Figma designs

#### Project - BlockDuelers blockduelers.io

- Designed a system to keep the app synced to the blockchain resulting in a profile loading time reduction from 1-15 mins down to ~10 secs
- Programmed a cross-chain feature which allows foreign NFTs to be available for use on the platform
- Partially rebuilt backend to improve performance, stability and scalability (reduced database calls by 50%, increased efficiency of data parsing...)
- Upgraded and refactored legacy frontend code
- Redesigned battle AI to be more fair and tunable from admin tools

## Project - NFT Marketplace solidity smart contract

- Designed and implemented a marketplace contract with the following features:
  - · Auctions and bids
  - ERC721 sale
  - Offers on an NFT that isn't currently listed
  - Marketplace fees
  - Royalty fees
- Wrote tests with brownie and python (100% coverage), and deployed to testnet for further testing.

## **Education**

## 42 Silicon Valley

Computer Programming 2019-2021

- The 42 curriculum is accredited in France, where it leads to Bachelor's and Master's degrees.
- Project based curriculum with rigorous requirements
- Curriculum encapsulates everything from coding algorithms and data structures, to graphic systems(3D,UI), kernels, Operating Systems, Networking and threaded programs.
- Participated in Unity and VR/AR club where I developed applications for Hololens2 using Microsoft MR headset and magic leap

#### Broward College

Associate in Arts, Physics 2016-2018







## **SKILLS**

#### Development:

C, Python, Solidity, Git,
GNUMake, Unity

#### Web:

React, Node.js, HTML, CSS,
JavaScript

#### Web3:

Solidity, Brownie, Web3js, Ethersjs

## **PROJECTS**

#### Game Engine // C

- Mini game engine using the SDL2 libraries
- Supports input mapping, buttons, level manager, 2D sprites and sprite sheets and layered rendering.
- Implements a CSS Flex like positioning system

## Edge detection // c

github.com/LumenNoctis/ Shape\_detect

- Implemented Hough transform algorithm that can detect straight lines from an image drawn by the user
- Line detection has multiple parameters that can be fine-tuned to provide more accurate results
- Parameter space visualization