# Akshay Patel

# Blockchain Developer | Game Programmer

Canada | (438) 389-8043 | Email | LinkedIn | Portfolio | GitHub

## **Profile**

I am a blockchain developer with professional experience in front-end and back-end development, as well as designing, testing, deploying of smart contracts, NFTs, cryptocurrencies, and DeFi apps. I also have experience with the Unity game engine and I am knowledgeable in different parts of game development, algorithms, architecture, and game engine tool creation. I've worked on multiplayer, hyper-casual, action, and arcade games in the past.

#### **Blockchain Developer**

Plutonium, Montreal, Qc / Nov 2021 - Present

- · Worked on crypto trading website to which allows users to trade their cryptocurrency with each other.
- · Designed and developed smart contracts using the Solidity and implemented test scripts on the smart contracts using the truffle framework.
- Optimized the smart contract code and increased the efficiency by 15%, using the library functionalities of the solidity.
- Successfully reached the phase-2 of the Project.

### **Skills**

- · Programming Languages: Solidity, C#, C++, java, JavaScript, TypeScript, HTML, CSS, JSON.
- · JavaScript frameworks: React, Node, Chai, Mocha.
- Ethereum Tools: Truffle, Hardhat, Ganache CLI, Ethereum Virtual Machine, MetaMask.
- · Technologies: Web3, Ethereum, Solana, Smart contract, NFT, Crypto Token, DeFi.
- · Database: MySQL
- Unity: Editor Variables/Menus, UI, Physics, Animations, Sound, Particle Systems, Controller Support, Nav Mesh, Materials and Lighting, Shader Development, Rewired, Unity Input System, Local Multiplayer Support, Pro Builder.
- · **IDE and Other tools:** Visual Studio, VS Code, Eclipse, Unity Engine, IntelliJ Idea, PyCharm, GitHub desktop, Davinci Studio, Photoshop.
- · Project Management: Agile Scrum, Jira, Trello, Git, GitHub.

## **Projects**

#### Earth ERC20 Token (Solidity, Ethereum Blockchain, Ganache, Truffle, React.js)

- Earth Token is a social trading token that can be used to make transactions with an Ethereum crypto wallet like **MetaMask**.
- · I have used **Ganache-cli, Truffle Framework**, and **Solidity** to develop, deploy, and test my smart contracts.
- · I've also built a Clint side website using **React Js** so user can quickly purchase and sell crypto currency.
- Source Code

#### Red Moon Token (RMT) (Go, Solana Blockchain, Smart Contracts)

- The Red Moon Token (RMT) is a trading token based on the Solana blockchain with a supply limit of 100,000,000 RMT.
- · Using a crypto wallet like **Phantom Wallet**, you can transfer and receive RMT tokens.
- To create this, I have forked an official Solana-labs repository from **GitHub** and then deployed RMT tokens on the Solana blockchain using smart contracts.
- · Source Code

#### Crypto Women NFT (JavaScript, Ethereum Blockchain, Smart Contracts)

- The Crypto Women is my personal project that I created using JavaScript and Smart Contracts.
- · To make each **NFT unique**, I have used **10 different properties** with varying rarities.
- · In the future, I intend to integrate these NFT in a game.
- · Source Code

#### Plutonium Exchange (Smart Contracts, Solidity, Hardhat, Waffle, Chai, React, Tailwind CSS)

- · Plutonium Exchange is a **crypto trading platform** where user can search about latest crypto trends and **trade** various crypto currency with each other.
- To create back-end we have used Solidity to write smart contracts and used Hardhat and Waffle framework to test and deploy smart contracts.
- · To create front-end we have used HTML, React Js and **Tailwind CSS**.
- · Source Code

#### Arrow Maniac | PC (Unity, Shaders, Rewired, Unity Particle System, Singleton Pattern)

- · Arrow Maniac is a fast-paced local multiplayer **2D platformer game**. In this game, you fight with a bow and arrow, and your goal is to eliminate the other players before they eliminates you.
- · In this game I worked as Lead Level Designer and **Gameplay programmer** to create various features using Unity game engine.
- · I used **Shaders**, Unity particle system, Tile map, Time Manager, 2D Animation, and other tools to construct all of the game's maps, abilities, and game UI.
- Source Code

#### Space Bomber | PC (Unity, Unity Particle System, Singleton Pattern, Mixamo)

- · Space Bomber is a **3D top-down** wave survival game.
- · In this game, the player must survive against hordes of enemies while killing them as quickly as possible in order to obtain the highest possible score.
- · My responsibilities in this game were to develop the **particle effects**, levels, the ammo system, the **wave system**, the **game UI**, and three different types of bombs.
- · Source Code

#### Flocking AI | PC (Unity, 3D, Shaders, Flocking AI, C#)

- · A **3D unity Al project** to demonstrate flocking Al behavior in fishes.
- · To achieve realistic looking flock behavior, I created a **Predator and Prey relationship** between all types of fishes.
- · Big Fishes (**Predator**) will try to hunt down small fishes (**Prey**) and small fishes will try to avoid them while staying as a group and searching for fish food.
- Flocking AI is built on a **highly scalable architecture** that allows for an endless number of flocks to be supported. In addition, each flock is maintained by nine additional factors.
- · Source Code

#### Unity Editor Tools | PC (Unity Editor Scripting, C#, Scriptable Assets, Generic Class Generation)

- The **Color Editor tool** that helps to color the texture and then later on that texture can be applied on different 3D objects.
- · I also created one **Object control tool** using which you can add, remove, duplicate and change position of the objects in array directly from unity inspector.
- · Source Code

# **Education**

**Video Game Programming |** Jan 2020 – Nov 2021 ISI, L'institut Supérieur d'Informatique, Montreal, QC

**Bachelors in Information Technology |** Aug 2015 – Jun 2019 Gujarat Technological University, Gujarat, India