

Prashant Tyagi

Software Engineer

Full-stack developer with proven experience in planning and delivering production quality code.

✉ tyagi.prashant0099@gmail.com

☎ +31621691578

📍 Amsterdam, Netherlands

SKILLS

Python

Node.js

Rust

FastAPI/Flask/Django

Ethereum

Polygon

Blockchain

Solidity

React

OpenCV(C++)

REST API

Gitlab CI/CD

Javascript ES6

Machine Learning

Deep Learning

Postgres

Tensorflow

Pytorch

Keras

rasberry pi

C#

Docker

Microservices

Kubernetes

Linux

WORK EXPERIENCE

Software Engineer Metabolic B.V.

09/2021 - Present

Amsterdam, The Netherlands

Tackling global sustainability challenges through systems thinking, data science, and innovation.

Achievements/Tasks

- Wrote the inner workings of the product using Rust like the impact calculation engine to bolster efficiency.
- Contributed to overall Software Architecture of the platform.
- Used Solidity and Polygon blockchain(web3.py/web3.js) to write smart contracts for carbon footprinting.
- Used decentralised oracles like Chainlink to get emissions data to make our smart contracts function on actual reliable data.
- Optimised gas transactions to make the execution of smart contracts efficient and focus on efficiency(Reduced cost of deployment by 40% using Polygon blockchain to automate biodiversity impact assessment)
- Built a private blockchain using Hyperledger Fabric 1.0 that enhanced data security and reduced risk exposure by 93%.
- Improved gas savings from token transfers by 85% using encoding design inspired by the Balancer Labs Protocol and adding an internal balance accounting and ERC-20 fungibility to the governance token.

Software Engineer Hope Technik

11/2020 - 09/2021

Singapore

HOPE Technik has been evolving the industry landscape with its technological innovations since 2006.

Achievements/Tasks

- Developed smart contracts to move contractual obligations(agreements) of the company on-chain.
- Designed a wide modular Python engine which gathers pollution data from the IOT sensors and sends it on-chain using web3.py
- Built an organisational DAO for internal use of the company automating bureaucratic processes within the company.
- Development Practises: CI/CD, pair-programming, Test Driven Development(TDD), Behaviour Driven Development(BDD). For managing microservices, we use Docker here.

WORK EXPERIENCE

Software Engineer

Sopra Steria

05/2019 - 10/2020

India

Sopra Steria Group SA is a European information technology consultancy established in September 2014

Achievements/Tasks

- Used Rust to build web APIs based on microservices architecture. Devise different APIs for getting asset list(GET), searching asset list based on user selection criteria(GET), Importing the asset list(POST), Implemented logging API(POST) which posts logs from the client side to the server side. Deployed these APIs using Docker and Kubernetes.
- C++ : For maintaining the core data-layer, the inner modules, workflows. Used bazel to build the C++ project.
- Python: Developed a machine learning model in tensorflow for recognizing objects in images and finding relevant context to the images. Deployed the model over cloud using docker and Kubernetes using flask REST API(A Microframework for developing REST in python). Cloud is a linux based machine with Nvidia K80 gpu. Also some parts of the app were written in Django.
- Worked in frontend engineering to build SPA(Single Page Applications) and delivered various components. Optimized component communication through Application state management by maintaining store. Technologies used : Vue.js, Webpack, Vuetify, HTML, CSS, Bootstrap, JavaScript, LESS/SASS.

PROJECTS

LegitART DAO (07/2023 - Present)

- Developed LegitART as a DAO community platform through auctioning 4k-artwork as NFT.
- Built Treasury for managing the money raised through auctions, Propositions, Voting mechanism and the auctions platform itself.
- Used Solidity for writing smart contracts and Polygon for deployment.
- Project Website: <https://legit-art-dao.vercel.app/>

Crowdfunding Dapp (03/2023 - 09/2023)

- Orchestrated the integration of blockchain technology, leveraging smart contracts to automate fundraising processes, escrow services, and transparent fund distribution.
- Designed and deployed smart contracts to govern fundraising campaigns, enabling automatic and trustless execution of contribution terms, ensuring the security and integrity of transactions.
- Implemented a tokenization system to facilitate the issuance of rewards and perks to backers, enhancing the incentive structure and encouraging community participation.
- Implemented decentralized identity verification protocols, ensuring the authenticity of project creators and backers while prioritizing privacy and security.

NFT Marketplace (08/2022 - 03/2023)

- Full Stack blockchain app for building an NFT marketplace integrated with metamask and other payment wallets.
- Spearheaded the integration of blockchain technology, leveraging smart contracts to ensure secure, transparent, and tamper-proof transactions within the marketplace.
- Designed and implemented smart contracts to enable the creation, transfer, and ownership tracking of NFTs, ensuring compliance with industry standards and interoperability.
- Collaborated with payment service providers to integrate secure and efficient payment gateways, allowing users to transact in various cryptocurrencies and fiat currencies.

EDUCATION

Bachelor of Engineering(BEng)

Dr. A.P.J. Abdul Kalam Technical University

08/2015 - 05/2019

Branch

- Information Technology
- Percentage : 71.36%

All India Senior School Certificate Examination

Air Force School

04/2013 - 04/2014

Courses

- Physics, Chemistry, Mathematics, English.
- Percentage: 90.8%.