# Dawid Pisarczyk

# Summary

Innovative and driven software developer with a strong foundation in blockchain technologies, decentralized finance (DeFi), and smart contract security. Experienced in building scalable decentralized applications, integrating cryptocurrency wallets, and developing Web3 infrastructure. Proficient in TypeScript, React, and Solidity, with hands-on experience across the full development stack including hosting, SEO, and secure backend integration. Currently pursuing an MEng in Computer Science with Cyber Security at the University of Southampton, with a focus on privacy-enhancing technologies and blockchain scalability. Passionate about contributing to cutting-edge DeFi and wallet infrastructure projects, leveraging strong problem-solving skills and a deep curiosity for emerging technologies in the Web3 ecosystem.

#### Projects

### CodeGene - AI-Powered Smart Contract Security Platform

GitHub

- Developed a VS Code extension for Hardhat projects, integrating AI-driven vulnerability scanning and automated penetration test generation directly within the IDE.
- Implemented real-time security insights and in-editor remediation suggestions, streamlining the audit process through seamless integration with local Hardhat environments and LLM-driven test refinement.
- Introduced cross-chain contract translation capabilities, facilitating interoperability across different blockchain platforms.
- Deployed NFT-backed insurance certificates (ERC-721 tokens) that serve as verifiable on-chain proofs of insurance, providing blockchain developers with a comprehensive safety net for smart contract deployment.

## LLMBroker - Decentralized Compute-Sharing Platform for LLMs

GitHub

- Engineered a decentralized platform enabling users to run large language model (LLM) inferences on idle computing hardware, offering crypto rewards to participants.
- Integrated smart contracts, remote procedure call (RPC) interactions, RESTful APIs, and cryptocurrency payment mechanisms to facilitate secure and trustless transactions.
- Utilized the Flare Time Series Oracle (FTSO) to obtain real-time FLR-to-USD price data, stabilizing input token prices within smart contracts and ensuring fair compensation for compute providers.
- Published an NPM package that simplifies interaction with the smart contract marketplace, abstracting token purchasing, server discovery, and request handling into an easy-to-use JavaScript library.

#### XRPLendNet - NFT-Collateralized Lending DApp

GitHub

- Developed a decentralized application (DApp) on the XRP Ledger EVM sidechain, enabling users to securely and conveniently set up, trade, and achieve loans between users using NFTs as collateral.
- Designed loans as transferable NFTs, allowing for securitization, transferability, and collateral functionality.
- Implemented functionality for NFTs and tokenized real-world assets (RWAs) to serve as collateral for loans, enhancing the utility and liquidity of digital assets.
- Recognized with a technical prize at the EasyA XRP London Hackathon for innovation in decentralized finance solutions.

## AssetXChange – Real-World Asset Tokenization DApp

GitHub

- Created a user-friendly DApp for tokenizing and managing real-world assets on the Etherlink Layer 2 blockchain, making asset management accessible to non-technical users.
- Enabled businesses to create customizable "Asset Types" and tokenized assets, facilitating internal resource management or customer transactions.
- Deployed ERC-721 smart contracts on the Etherlink testnet to enhance secure linking of on-chain and off-chain data, ensuring transparency and traceability of assets.
- Recognized for innovation with a mainline track prize at the ETH Oxford Hackathon, highlighting the project's impact on simplifying asset tokenization processes.

# EDUCATION

## SKILLS

- Web Development: ReactJS, NextJS, TailwindCSS, RESTful APIs using ExpressJS
- Blockchain & Smart Contracts: Solidity, Hardhat, Remix, RPC & Wallet interaction (Thirdweb, web3js), IPFS, ERC20
- Programming Languages: Javascript, Typescript, Java, C#, SQL (SQLite, DataGrip), Haskell, LaTeX, Solidity, Python
- Tools & Frameworks: Node.js, Git/GitHub, Vercel, Solidity, Remix IDE
- Cloud & APIs: Cloudflare, Vercel, RESTful APIs (ExpressJS), Flare Time Series Oracle (FTSO)
- Security & Cryptography: Cybersecurity fundamentals, encryption techniques, smart contract security

## Work Experience

## Freelance Web Developer - Architectural Studio

February 2025 – Present

- Designed and developed a responsive, SEO-optimized website showcasing the firm's portfolio, enhancing online visibility and client engagement.
- Implemented a secure contact form with backend integration, facilitating efficient client inquiries and communication.
- Managed domain registration, hosting setup, and ongoing maintenance, ensuring website reliability and performance.
- Collaborated closely with the architectural team to translate design aesthetics into a cohesive digital presence.

### Team Member - Wingstop Southampton

August 2024 - January 2025

- Efficiently learned and adapted to various FOH and BOH roles, leveraging previous skills to quickly become proficient and support smooth operations.
- Delivered fast, friendly customer service while maintaining food quality and safety standards, ensuring a positive dining experience.
- Collaborated closely with team members to ensure seamless coordination during peak hours, contributing to overall team success and customer satisfaction.

## Volunteer Teaching Assistant - ABC Polish School Poole

September 2022 - April 2023

- Supported teachers in delivering lessons and activities to students, providing individualized assistance where needed.
- Offered support to students with their language learning journey, reinforcing concepts and facilitating practice sessions.
- Incorporated elements of Polish culture into lesson plans, enriching students' understanding of their heritage through activities such as storytelling, traditional games, or celebrating Polish holidays.

# EXTRACURRICULARS AND INTERESTS

- Current Focus: Deepening expertise in smart contract security, exploring Trusted Execution Environments (TEEs), and advancing skills in zero-knowledge proofs and Rust for blockchain scalability.
- Hobbies: Active hackathon participant, cybersecurity and DeFi enthusiast, basketball player, snowboarder, Catan strategist, and Web3 community builder.

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