PiLiquidity Technical Whitepaper

A Decentralized Liquidity Model on the Pi Network

1. Introduction

PiLiquidity is a decentralized infrastructure designed to strengthen the Pi Network economy by leveraging a community-driven liquidity model. Based on the principles of CDLP (Community-Driven Liquidity Pool), this system encourages stable, continuous contributions through DCA (Dollar-Cost Averaging), while fostering real utility through merchant adoption and community governance.

2. System Overview

The architecture consists of modular components: a user portal, a merchant onboarding system, a non-custodial wallet framework, a transparency dashboard, and a governance layer. The goal is to stabilize Pi Coin's value organically through regular contributions and long-term holding.

3. Platform Components

- DCA Contribution Portal

- Non-Custodial Wallets

- Transparency Dashboard

- Merchant Directory

- Reward Engine

- DAO Governance

4. Technical Architecture

- Frontend: React.js + Tailwind

- Backend: FastAPI or Node.js

- Auth: Firebase Auth or Pi Wallet

- Database: PostgreSQL + Firebase

- Blockchain: Pi Wallet SDK

5. Security & Compliance

- Fully non-custodial

- MIT licensed

- SSL encryption

- Transparent on-chain metrics

6. Use Case Scenarios

- Pioneer contributes Pi monthly

- Merchant accepts and uses Pi

- Community votes via DAO

7. Conclusion

PiLiquidity transforms passive holding into real utility. Through decentralization, transparency, and active contribution, it forms the foundation of a fair and functional digital economy.