# Hedron DeFi Al Agent Al-powered DeFi navigator & educator democratizing Hedera Hashgraph DeFi

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Hello Future Hackathon

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## Agenda

- Team Introduction
- Project Overview
- Technical Innovation
- Market Integration & Success
- Future Roadmap
- 6 Demo & Live Showcase
- Conclusion

#### Meet Our Team





#### Ashutosh Kumar

## **Developer Relations**

#### India

- Community Building
- Developer Advocacy
- Technical Docs

#### Sebastian Diaz

## **Lead Developer**

#### Colombia

- Full-Stack Development
- AI/ML Integration
- Smart Contracts

Expertise: Blockchain, Al, DeFi & Communities

## The Problem We're Solving





## **Novice Users Challenges**

DeFi ecosystem complexity overwhelming new users Technical knowledge barriers prevent participation High risk of losses from uninformed decisions

Fragmented information across platforms

Lack of educational guidance for DeFi concepts

#### **Expert Users Pain Points**

Inefficient manual monitoring of multiple protocols

Missed arbitrage opportunities in fast markets Complex comparative analysis between protocols

Lack of automation tools for data-driven decisions

Time-consuming vield optimization research

Result: DeFi remains inaccessible to novices while experts waste time on manual tasks

## Our Solution: Hedron DeFi Al Agent



#### Al-Powered DeFi Navigator & Educator







#### Conversational Al Interface

- Real-time WebSocket communication
- Natural language queries
- Contextual educational guidance
- Step-by-step DeFi tutorials

#### Multi-Protocol Analysis

- SaucerSwap DEX (+44% TVL) Bonzo Finance lending (\$38M)
- AutoSwapLimit orders
- Infinity Pool staking

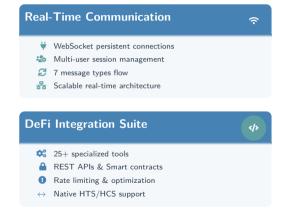
#### **Smart Automation**

Non-custodial security

External transaction signing Automated yield optimization

Risk assessment tools

#### **Technical Architecture & Innovation**





Al Intelligence Layer

## Comprehensive DeFi Platform Integration

## SaucerSwap Integration



- +44% Hedera DeFi TVL
- +60% unique wallets
- Token swap quotes & execution
- Real-time price discovery
- Infinity Pools staking

#### **Bonzo Finance Integration**



- \$38M TVL (Q4 2024)
- Aave V2 fork architecture Supply assets for interest Real-time lending rates
- Risk assessment tools

#### **AutoSwapLimit Features**



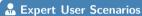
- Advanced limit order system Automated execution
- Price monitoring & alerts
- Order management
- Strategic trading automation

Result: Comprehensive DeFi ecosystem coverage with educational guidance

#### Comprehensive Use Cases



- "What are the best yield opportunities on SaucerSwap?"
- "How does lending work on Bonzo Finance?"
  - "What are limit orders and how can I use them?" "Explain DeFi risks and safety practices"
- "Guide me through my first yield farming"



- "Show me best APYs between SaucerSwap and Bonzo"
- "Set up automated limit orders for my strategy"
- "Analyze my positions across all protocols"
- "Alert me when HBAR drops below \$0.10"
- "Find arbitrage opportunities in real-time"

From education to automation: serving both learning and earning goals

#### Success Metrics & Validation



- WebSocket Agent: Multi-user real-time system
- 25+ DeFi Tools: Complete integration suite
- Al Intelligence: LLM with persistent memory
- 7 Message Types: Comprehensive communication



- First Al agent with AutoSwapLimit integration
- Natural language DeFi operations
- Intent-based routing to specialized tools
- External signing for maximum security

Result: Production-ready Al agent with comprehensive Hedera DeFi integration

## Key Benefits & Value Proposition



Time savings: Automated analysis vs manual research
Maximized yields: Al identifies best opportunities
Real-time optimization: Continuous monitoring

Multi-protocol analysis: Unified dashboard view

## **△** Security & Education

Non-custodial: Never holds user funds Educational layer: Learn while earning

A Risk reduction: Comparative protocol analysis

External signing: Maximum security

## Accessibility & Automation

Democratizes DeFi: Access for all skill levels

Natural language: No technical jargon required
Smart automation: Intent-based tool routing

Contextual guidance: Step-by-step tutorials

## (## Market Impact

- ↑ Increases Hedera adoption: Easier DeFi UX
- Innovation leadership: First Al agent with AutoSwapLimit
- Community building: Educational content creation
- Open source: Contributions back to ecosystem

## **Enhanced Future Roadmap**



- Advanced SaucerSwap: Liquidity pool analytics & farming optimization
- Smart alerts: Automatic notifications for opportunities
- Web dashboard: Graphical interface complement
- Enhanced tutorials: Interactive DeFi learning modules

#### Phase 2: Advanced Intelligence

- Expanded Bonzo tools: Liquidation monitoring & advanced strategies
- AutoSwapLimit improvements: Sophisticated order types
- ML predictions: Al-powered yield forecasting
- Portfolio optimization: Automated rebalancing

## # Phase 3: Ecosystem Expansion

- Additional protocols: HeliSwap, Stader Labs integration
- Advanced analytics: Cross-protocol yield comparison
- API access: Third-party integrations
- Enterprise solutions: Professional trader tools

#### Community Impact Goals

- Democratize DeFi: Making complex protocols accessible
- Educational mission: Comprehensive DeFi literacy program
- Hedera growth: Driving ecosystem adoption
- Open source: Contributing tools back to community

#### Live Demo Showcase

# **▶** WebSocket Agent Demo

## Agent Interactions

- CONNECTION AUTH: User authentication
- Natural language: "Show me SaucerSwap vields"
- SWAP QUOTE: Structured price data
- AutoSwapLimit: "Set limit order 1000 SAUCE"
- Multi-step flows: Bonzo deposits

#### Technical Demo Points

- WebSocket messages: Real-time communication
- 25+ DeFi tools: Intelligent routing
- Memory persistence: Context awareness
- Transaction flow: External signing
- Error handling: Graceful failures

Demo Command: npm run start:websocket

## Why Hedera DeFi Al Agent Wins



- First Al WebSocket agent for Hedera DeFi
- 25+ specialized tools integration
- Intent-based routing system

#### Technical Architecture

- Real-time WebSocket communication
- Persistent memory for context
- Multi-user sessions support

## **P** DeFi Integration

- SaucerSwap: DEX, quotes & Infinity Pools
- Bonzo Finance: Lending & borrowing
- AutoSwapLimit: Advanced limit orders

## **#** Agent Capabilities

- Natural language DeFi operations
- 7 message types for comprehensive flow
- External transaction signing

## ▼ Market Impact

- Democratizes DeFi access for all users
- Reduces complexity through AI assistance
- Enables automation without custody

## **≯** Production Ready

- TypeScript & Zod validation
- Comprehensive error handling
- Smart caching & rate limiting

#### Thank You!



#### **Questions & Discussion**

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Developer Relations

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Demo: https://youtu.be/mDIc\_fJEbsw