

Phan Đình Minh Hiếu

SKILLS & TECH STACK

Programming Languages

- Golang (5 years) - Experienced in building APIs, socket servers, and blockchain systems.
 - o Frameworks & Tools: Gin, Gorm, Sqlx, gRPC, gqlgen (Go GraphQL), Swagger (swag), GoMock.
 - o Expertise: Microservices architecture, concurrency (Goroutines), and low-latency API design.
- Node.js (3 years) - Developed REST APIs and real-time services.
- PHP (2 years) - Worked with Laravel, Wordpress for web applications and loan systems.
- Python (3 years) - Used in backend services, AI Agent logic, file management systems, and ML pipelines.

AI & Agentic Engineering

- Deep understanding of LLM models, LangChain, and RAG (Retrieval-Augmented Generation) architectures for building intelligent agents.
- Proficient in designing and implementing MCP (Model Context Protocol) and Vector Database Storage for agentic memory.
- Experienced in training and deploying Computer Vision models (Object Detection, Segmentation) and Neural Networks (CNN, RNN).
- Capable of building Predictive Models for financial data, utilizing AI to drive decision-making and risk management in trading environments.
- Skilled in LLM Tool-calling, Intent Recognition, and orchestrating multiagent workflows for autonomous task execution.

Blockchain

- Deep understanding of Bitcoin, Ethereum, and custom Layer 1 designs.
- Implemented consensus protocols: PoS, PoH, PoW.
- Built full-featured blockchain cores with EVM compatibility.
- Proficient in writing and deploying smart contracts (Solidity) and developing DApps (DEX, bridge, NFT game, binary MLM).
- Familiar with wallet integrations, token standards (ERC-20, ERC-721), and cross-chain bridges.

Databases & Caching

- Relational: MySQL, PostgreSQL
- NoSQL: MongoDB, Elasticsearch, levelDB
- Caching: Redis - Caching: Redis, Memcached
- Messaging & Streaming: RabbitMQ, Kafka

Messaging & Streaming

- Linux server administration, Shell/Bash scripting
- Docker, Docker Compose, Kubernetes
- Deployment automation with Git, PM2, and custom scripts
- ELK Stack (Elasticsearch, Logstash, Kibana)
- Grafana & Prometheus
- GitHub Actions, GitLab CI

DevOps & Infrastructure

- Linux server administration, Shell/Bash scripting
- Docker, Docker Compose, Kubernetes
- Deployment automation with Git, PM2, and custom scripts
- ELK Stack (Elasticsearch, Logstash, Kibana)
- Grafana & Prometheus
- GitHub Actions, GitLab CI

Cloud & Hosting

- Google Cloud Platform (GCP): VM, Cloud Storage, Cloud Functions, Load Balancer
- Experience deploying systems on bare-metal servers, VPS, and containerized infrastructure

Other Tools & Skills

- Asterisk VoIP (auto call and answer system integration)
- OCR and document verification using ML (OpenCV, Tesseract)
- Strong understanding of cryptography: digital signatures, hashing, symmetric/asymmetric encryption
- API documentation and collaboration: Postman, Swagger

EXPERIENCE

BunnyOS – Senior backend developer

09/2025 – 03/2026

- Architected and developed a sophisticated AI Agent using Mastra and NestJS, enabling autonomous decision-making and cross-chain execution within the decentralized finance (DeFi) ecosystem.
- Engineered multi-agent workflows that leverage LLMs for intent recognition and real-time decision-making, integrating Virtuals Protocol (ACP) for agent-to-agent communication and liquidity discovery.

- Developed a high-performance AI Chatbot layer, focusing on seamless natural language interaction and automated query handling for complex Web3 protocols.
- Ensured system reliability and data precision by leveraging Kysely for type-safe database interactions and Testcontainers for rigorous integration testing of non-deterministic agentic workflows.
- Optimized AI decision-making precision by architecting real-time data pipelines with Viem and Moralis, providing agents with high-fidelity onchain signals and market sentiment analysis.

Guarantek – *Backend Team Lead*

12/2024 - Present

- Led the development of Fichain, a Layer 1 blockchain tailored for the banking and financial sector. Leveraged Golang's efficiency to build high-performance consensus mechanisms and state machines, ensuring strict regulatory compliance and scalability.
- Architected and launched an AI-Powered Stock Trading Platform, transitioning from a traditional DApp to an intelligent trading ecosystem:
 - Developed high-concurrency data pipelines in Golang to crawl and process global trading data in real-time, integrating LLM-based sentiment analysis for market news and social signals.
 - Built an AI-driven risk management engine that combines technical analysis (indicators) with predictive modeling to assist in automated trade decision-making.
 - Implemented an agentic workflow using Golang's goroutines to aggregate multi-source financial data, providing users with personalized portfolio insights and automated rebalancing.
- Managed and scaled a 3-member cross-functional team (AI/ML, Blockchain, and DevOps), implementing MLOps and CI/CD best practices to ensure the stability and security of high-frequency trading services.

Onefusion – *Head of Blockchain*

1/2025 - 6/2025

- Led and mentored a 3-person blockchain team, managing task allocation, technical reviews, and performance to deliver high-quality solutions on time.
- Defined the technical architecture and roadmap for the company's blockchain initiatives, aligning with business goals and long-term vision.
- Spearheaded the development of smart contracts and backend infrastructure for several Web3 applications, including:
 - Loyalty Reward System on blockchain for customer retention and engagement.
 - NFT Membership System, providing gated access and on-chain user privileges.
 - Token Staking and Vesting Modules for investor and team token management.
- Defined the technical architecture and roadmap for the company's blockchain initiatives, aligning with business goals and long-term vision.

- Collaborated with cross-functional teams (frontend, product, design, QA) to integrate blockchain services seamlessly with traditional backend systems.
- Ensured smart contract quality and security through code audits, gas optimizations, and integration tests on Ethereum and BSC.

BeEarning – *Senior backend developer*

10/2021 - 12/2024

- Designed and implemented the block production mechanism and a mobile-friendly light client. Developed high-performance consensus modules using Golang, enabling users to participate in validation and transaction verification directly from smartphones with minimal latency.
- Developed and deployed several decentralized applications (DApps), including:
 - Cross-chain Bridge DApp: Enables seamless asset transfers between BeEarning Chain and major networks such as Ethereum and BNB Chain.
 - Binary Tree Multi-level Marketing (MLM) DApp:
 - Built a smart contract system to support binary tree referral structures.
 - Designed a mathematical reward distribution model to ensure fairness, sustainability, and prevention of abuse.
 - Implemented auto-payout logic based on dynamic rank and commission levels.
- Integrated an off-chain reward calculation engine developed in Golang. This engine syncs with on-chain triggers via WebSockets/RPC, processing massive reward datasets with high precision and transparency.
- Contributed to blockchain documentation, whitepapers, and technical specifications for external partners and investors

Ibenefit – *Senior backend developer*

5/2018 - 10/2021

- Developed a Student Lending Platform using Node.js and PHP, featuring:
 - Loan application workflows, credit scoring logic, and repayment tracking.
 - Admin dashboard for loan management and automated decision rules.
 - Secure API services for mobile and web client integration.
- Built a File Management Service with Django to handle secure document uploads, versioning, access permissions, and file preview.
- Designed and trained Machine Learning models to automate ID card verification:
 - Implemented OCR pipelines using OpenCV and Tesseract to extract user data from scanned documents.
 - Integrated ML-based ID classification and liveness detection to reduce fraud.
- Set up and configured an Asterisk VoIP server for automated customer communication:

- Enabled auto-call and auto-answer features for loan reminders and notifications.
- Integrated with backend services for dynamic script generation and reporting.

Glorucode – *FullStack developer*

4/2017 – 5/2018

- Developed and maintained multiple outsourced websites for clients across various industries, including e-commerce, education, and corporate portfolios.
- Worked on both frontend and backend, using technologies such as PHP (Laravel, Wordpress), JavaScript (jQuery), and HTML/CSS/Bootstrap.
- Designed responsive UI/UX layouts and implemented dynamic features based on client specifications.

EDUCATION

University Of Information Technology – *Software Engineer*

6/2016 – 12/2021

Graduate thesis: Blockchain system for saving deposit in Bank

University Of Information Technology – *Master of Science in Computer Science*

8/2022 – 8/2025

Master's thesis: Developing a Mobile Virtual Assistant using

Large Language Models for Task Automation

PUBLICATIONS

Developing a Mobile Virtual Assistant Using Large Language Models for Task Automation – *Phan, Dinh Minh Hieu and Luong, Ngoc Hoang*

2024 – 2025 [URL address](#)

This research enhances mobile virtual assistants by integrating Multimodal Large Language Models (MLLMs), enabling better handling of complex requests and dynamic app interfaces through visual understanding.

CERTIFICATES

TOEIC – 875 **VSTEP** – B2