

Pham Viet Thanh

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Summary

Software engineering student with hands-on experience building full-stack applications and AI-integrated tools across backend APIs, database design, and frontend interfaces. Comfortable working across the stack from REST API design and data modeling to React-based UIs with growing depth in AI engineering fundamentals. Looking to contribute as a full-stack while building toward a long-term focus in AI engineering.

Education

HCMC University of Foreign Languages and Information Technology **Nov 2024 – Jul 2027**
Bachelor of Software Engineering

Relevant Coursework

Data Structures & Algorithms	Object-Oriented Programming
Database Systems	Software Testing & Quality Assurance
Project Management	Web/App Development
Design Patterns	Business Analyst

Skills

Languages:	JavaScript/TypeScript, Python, HTML/CSS
Frontend Frameworks:	React, Next.js, Tailwind CSS, Vite
Backend Development:	Node.js, Express, FastAPI, RESTful APIs, JWT Authentication
AI & Data:	NumPy, Pandas, AI API Integration, AI-assisted Development
Databases (SQL/NoSQL):	PostgreSQL, MongoDB, Prisma, Redis
Tools & Practices:	Git, GitHub, Docker, Postman, CI/CD

Experience

Backend AI Engineering Intern **Jun 2026 – Present**
FlyRank AI *Remote*

- Building backend services and REST APIs using TypeScript, Node.js, PostgreSQL, and modern software engineering practices to support AI-powered applications.
- Developing production-ready backend features including authentication, authorization, asynchronous background jobs, and containerized development workflows with Docker.
- Integrating AI APIs into backend applications and implementing document ingestion pipelines to support AI-driven workflows and data processing.
- Designing interactive workflow orchestration interfaces with React Flow while collaborating through Git-based development, debugging, testing, and code reviews.
- Applying AI engineering principles and AI-assisted development practices throughout a production-oriented capstone project, while earning Anthropic Claude certifications.

IT Labeling / Product Annotation Contributor **May – June 2026**
Acacy Co., Ltd. *On-site*

- Annotated product images in CVAT with bounding boxes and category labels, maintaining consistent object boundary precision across images for downstream computer vision model training
- Filtered and curated raw product images for AI training suitability, screening out low-quality, ambiguous, or mislabeled samples before dataset handoff
- Applied inter-label consistency standards across annotation batches, reducing rework flagged during QA review

Certifications

- **Google AI Essentials** – *Google* *Jul 2026*
Understood prompt engineering strategies and AI-driven workplace productivity.
- **Claude Code 101** – *Anthropic* *Jul 2026*
Hands-on experience with Claude Code, agentic workflows, prompt engineering, and context management for AI-assisted development.
- **TOEIC Listening & Reading** – Score: 870 *Jun 2026*
Administered by IIG Vietnam (Official ETS Representative). Verified advanced professional English proficiency.

Projects

Retail Product Detection *Python, YOLOv8, CVAT, OpenCV, Pandas, NumPy* **May 2026 – Present**
github.com/Thanhbo209/retail-product-detection

- Built a one-class retail product detection pipeline using YOLOv8, converting shelf annotations to YOLO format with bounding-box validation, label visualization, training, and inference export with per-image product counts
- Designed a CVAT human-in-the-loop labeling workflow that separated model pre-labels from corrected ground truth, improving precision from 0.249 to 0.635, mAP50 from 0.090 to 0.408, and detecting 117/120 products on a dense shelf image at confidence above 0.50
- Experimenting with augmentation configurations (mosaic, HSV shifts, horizontal flip) and confidence/IoU threshold tuning to push mAP50 beyond current 0.408 baseline; evaluating multi-class expansion to include shelf labels as a second detection target

FinAI – Expense Intelligence Platform *TypeScript, Node.js, Express, PostgreSQL, Prisma, Python, FastAPI, React, Docker* **Apr – May 2026**
<https://github.com/Thanhbo209/finAI-assistant>

- Built a natural-language transaction parser that extracts amount, merchant, and category from free-text input (e.g. "mua cà phê 35k") via a tiered resolution pipeline user alias, global alias, Node.js keyword matching, then Python FastAPI embeddings as a last resort skipping ML entirely on high-confidence matches
- Implemented human-in-the-loop confirmation with inline field editing before persistence, and JSONL telemetry export to support offline evaluation of merchant resolution quality
- Structured telemetry captures alias acceptance, merchant resolution paths, and category confidence per transaction designed to train future ML models that analyze spending patterns and personalized financial decisions for users

AI Resume Analyzer *Javascript, React Router v7, Tailwind CSS, Puter.js, Zustand* **Jan - Feb 2026**
github.com/Thanhbo209/ai-powered-resume-tracking

- Architected a serverless full-stack app on Puter.js's cloud platform, using its hosted Claude Sonnet integration for resume scoring and multi-turn AI feedback without managing a backend or API keys directly
- Implemented client-side request deduplication and response caching via Zustand, cutting redundant Sonnet API calls by over 60
- Built session-based authentication through Puter.js's native auth layer and integrated its cloud file storage with global sharing, letting users generate a shareable public link to their analyzed resume and scoring breakdown