Khoa Pham

Data & AI product development · Engineering · Leadership

pntkhoa@gmail.com · github.com/KeonPham · linkedin.com/in/khoapnt

AI product development
Data engineering & architecture
Team building & hiring
Regional stakeholder leadership
Learning & mentoring

Education

MSc (Professional), Data Science and Artificial Intelligence Applications · AIT, 2025

BSc Geology · VNU–HCM University of Science, 2012

MAY 2026— PRESENT

VNG
embracing challenges

Data & AI Product Manager

VNG Corporation · Ho Chi Minh City, Vietnam

Build AI-native products from business discovery through development and deployment, combining hands-on LLM integration and agent engineering with cross-functional delivery and executive stakeholder management.

AI products & use cases

- **AI-integrated applicant tracking system (ATS).** Build an ATS with LLM model calling and role-specific context for candidate scoring. Integrate Qwen models served through GreenNode, configuring the context and scoring criteria to support recruitment assessment workflows.
- **Analytics agents.** Develop agents that connect business questions, analytical context and tools to support data analysis and reporting. Work across DeepSeek, Qwen, Kimi, MiniMax, GPT and Claude models for AI and analytics use cases.
- **Agent tools for business deliverables.** Build an agent harness that enables LLMs to generate slides, documents, HTML reports and dashboards. Connect tools and contextual workflows with scheduled agents and sub-agents to coordinate tasks and produce usable outputs.
- **AI interviewing agent.** Build and deploy an AI interview agent using an agent framework to orchestrate the interview workflow and model interactions.

Discovery, delivery & executive alignment

- **Business problem discovery.** Interview stakeholders to understand their workflows, pain points and business needs, then translate these into AI product requirements and use cases.
- **Cross-functional collaboration.** Align business and technical teams on scope, requirements and delivery, connecting stakeholder needs with the practical capabilities of LLMs and agent systems.
- **Director & C-level engagement.** Manage senior stakeholders and present progress, product demonstrations and use cases in steering committee (SteerCo) sessions to support decisions and alignment.
- **Hands-on development.** Use Claude and Codex for prototyping, code generation, workflow design, testing and iteration of AI-enabled applications.

Models & serving: GreenNode (Qwen) · DeepSeek · Qwen · Kimi · MiniMax · GPT · Claude

Engineering & tools: LLM model calling · Context engineering · Agent frameworks · Agent harnesses · MCP / tool calling · Scheduled agents · Sub-agents · Claude · Codex

Product outputs: AI-integrated ATS · Analytics agents · Interviewing agents · Slides · Documents · HTML reports · Dashboards

AUG 2022— APR 2026

HEINEKEN

APAC Data Analytics Manager

The HEINEKEN Company · Regional & global manufacturing

APAC Data Analytics Lead · Aug 2022–Dec 2024
APAC Data Analytics Manager · Jan 2025–Apr 2026

Led data engineers and business analysts delivering Industry 4.0 analytics for brewery operations across APAC, Europe and global sites—from industrial data infrastructure to machine learning and operational decision-making.

Team building & regional leadership

- **Building the team.** Built and led a team of data engineers and business analysts, with involvement in hiring and developing the team's analytics capabilities.
- **Technical direction.** Built data models and pipelines and guided architecture and data-governance practices across AWS and Azure environments, translating manufacturing problems into analytical solutions.
- **Cross-border delivery.** Worked with technical and business stakeholders across APAC, the Netherlands, Poland, Mexico, New Zealand and South Africa. Managed Director and C-level stakeholders, presenting delivery updates, analytical insights and use-case demonstrations in steering committee (SteerCo) sessions. Trained regional teams in visualization and analytical methods.

Data foundations & operational analytics

Worked with industrial IoT and machine-condition data, brewing alarms, high-volume sensor records, and water, thermal-energy and electricity measurements.

- **Water & Energy Control Tower.** Architected pipelines and data models for tracking water, thermal energy and electricity across global breweries, using InfluxDB for time-series ingestion. Gave teams a common analytical foundation for monitoring resource consumption.
- **Power BI & Grafana analytics.** Built dashboards and analytical views for brewery operations, combining operational data models, Power BI measures and Grafana monitoring views to make manufacturing performance and equipment conditions easier to interpret.
- **Brewing alarm analytics.** Built MTBA (mean time between alarms) analytics to help identify operational interruptions, with an estimated potential to preserve **10,000 hectolitres of beer, equivalent to €260,000 per brewery per year.**
- **Brewing filtration & pasteurizer efficiency.** Built Power BI dashboards with advanced DAX and row-level security. Filtration reporting reduced manual work by **180 hours per brewery per year.**
- **Packaging material loss.** Developed Power BI analytics to surface material-loss opportunities, with an estimated **€25,000 reduction potential per brewery per year.**

Data science & machine learning

- **COP optimization.** Built machine-learning models for brewery cooling optimization, applying operational data to support more efficient cooling performance.
- **Filling-valve fault detection.** Designed statistical models and sliding-window features over hundreds of millions of sensor rows in PostgreSQL to identify filling-valve faults.
- **Condition monitoring.** Developed anomaly-detection models using machine-condition data to identify unusual equipment behavior and support maintenance decisions.

Financial and production estimates above are potential benefits; the filtration figure is the reported reduction in manual work.

Recognition: "The Develop Champion" · D&T of the Year 2023

Cloud & data: AWS · Azure · PostgreSQL · InfluxDB · Industrial IoT · Data modeling · Data pipelines

Analytics & data science: Power BI · Grafana · DAX · Row-level security · Machine learning · Statistical modeling · Anomaly detection · Time-series feature engineering

FEB 2022— AUG 2022

FPT Software

Data Engineer

FPT Software · FHM Aviation · Airbus France

Built and maintained data pipelines for the Airbus team in France on the Skywise big-data platform, connecting business requirements with dependable data transformations.

- **Pipeline development.** Worked with PySpark, SQL and AWS in the Airbus Skywise environment to develop and maintain data-processing workflows.
- **Lineage & upstream troubleshooting.** Traced data lineage, investigated upstream data issues and translated business requirements into pipeline changes.
- **International collaboration.** Collaborated with Airbus stakeholders in France and followed Agile / Scaled Agile Framework practices for development and deployment.

Tools & methods: Airbus Skywise · PySpark · SQL · AWS · Data lineage · Agile / SAFe

SEP 2012— JUL 2021

Baker Hughes

General Field Engineer

Baker Hughes · Vietnam, Oman, Malaysia, UAE & Australia

Combined field engineering, real-time drilling data and client coordination across five countries, building the operational and leadership foundation for my later work in data and AI.

- **Real-time data systems.** Configured and programmed equipment to collect structured drilling-well data, stored in MySQL databases at rig sites and client offices.
- **Operational visibility.** Built dashboards around client and stakeholder requirements to monitor drilling operations.
- **Commercialization.** Led a project into commercialization, with reported operational cost savings of **US$410,000 in 2016** and **US$1.06 million in 2017.**
- **Leadership in the field.** Developed through the LEAD engineering program, presented to senior executives, supported onboarding and coaching, and coordinated execution with clients and multicultural teams.

Focus: Field operations · Real-time data · MySQL · Dashboards · Client engagement · Cross-cultural teamwork