

Petros Lambropoulos

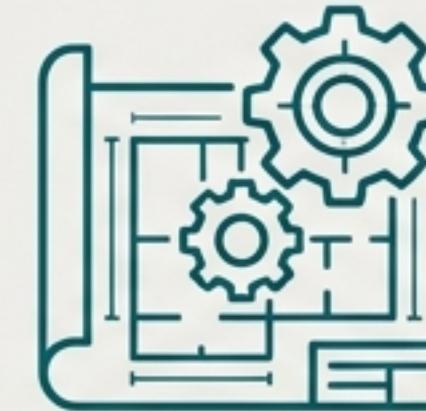
Shipping Production AI & High-Scale Platforms
for Venture-Backed Companies

A Product-Minded AI Leader for High-Growth Teams



1. Pioneering Generative AI

Leading the full lifecycle of GenAI initiatives, from validating novel concepts and securing executive buy-in to shipping robust, production-grade features.



2. Architecting for Scale & Resilience

Designing and building reliable, high-throughput data systems on modern cloud infrastructure, proven to handle massive datasets and withstand high-pressure incidents.



3. Startup-Proven Execution

Thriving in early-stage environments by balancing product-market fit exploration with the disciplined engineering required to secure first customers and enable growth.

Case Study: Pioneering Generative AI at Workable

Context: Workable, a leading hiring platform with a 0.5 billion-record corpus.

The Opportunity

How can a mature SaaS platform leverage emerging Generative AI to create new value and enhance user experience?

Key Actions

-  **Launched** the company's first generative AI proofs-of-concept for job-post generation, interview-question drafting, and advanced resume parsing.
-  **Presented** findings and potential company-wide, securing executive buy-in for productionisation.
-  **Partnered** directly with product and design teams to transform prototypes into shippable deliverables.
-  **Defined** critical evaluation, deployment, and monitoring standards for the company's evolving ML stack.

A key part of the role was...

“...translating outcomes for executives and clients.”

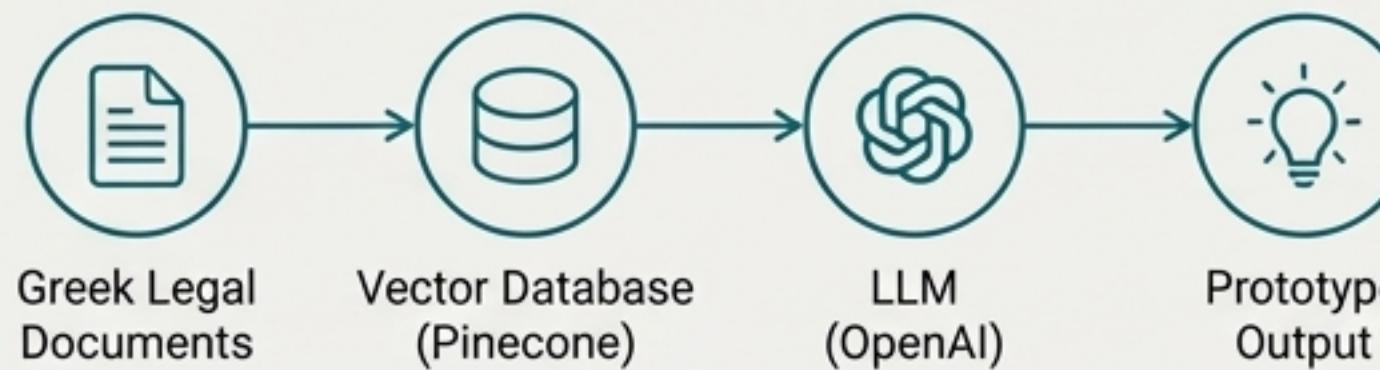
Case Study: Accelerating Startups with Applied AI

Consulting and advisory engagements with early-stage tech ventures.

Challenge

How can a new startup quickly build a functional AI prototype to validate their idea and secure initial funding?

Solution: Dikaio.ai (Legal-Tech Startup, 2024)



- ✓ **Action:** Guided the future CTO on applying a RAG (Retrieval-Augmented Generation) architecture with OpenAI.
- ✓ **Action:** Enabled the team to rapidly ship their first prototype for querying Greek legal documents.



Impact: Secured the pre-seed funding required to launch the company.

Additional Exploration: Langaware (2021)

- ✓ **Action:** Demonstrated a BERT-based solution for the Boston Theft Challenge to the CEO, showcasing a proactive exploration of applied NLP for a specific business problem.

Case Study: Architecting for High-Scale Data Processing

The Challenge

Building data platforms that can process massive datasets efficiently and scale to support a rapidly growing user base.

Solution 1: At Workable (Scale-up)



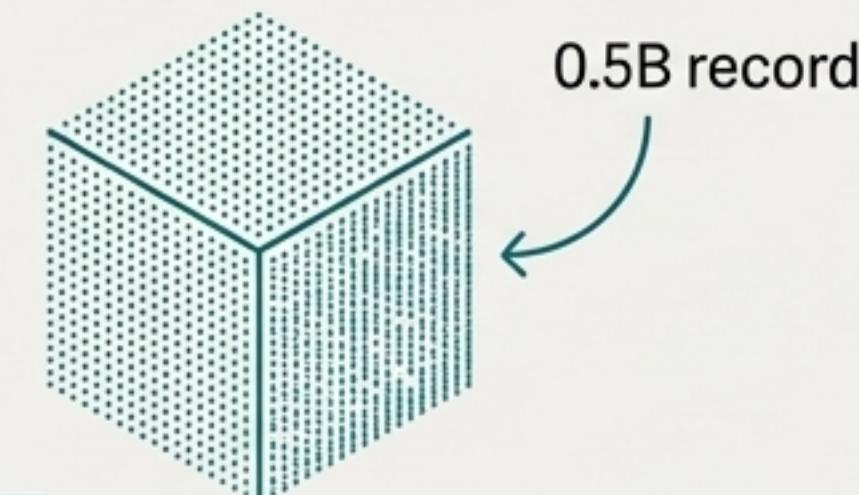
System

Built Python ML microservices on AWS EKS with Kafka/RabbitMQ event workflows.



Scale

Processed tens of thousands of resumes daily from a **0.5 billion-record corpus**, including large-scale data migrations.



Solution 2: At Encode S.A. (Growth Phase)



System

Architected a PySpark + Elasticsearch platform for network security analysis.



Scale

Optimized the core Python/MySQL pipeline to scale throughput **from 1,000 to 10,000 users**, eliminating chronic performance bottlenecks.

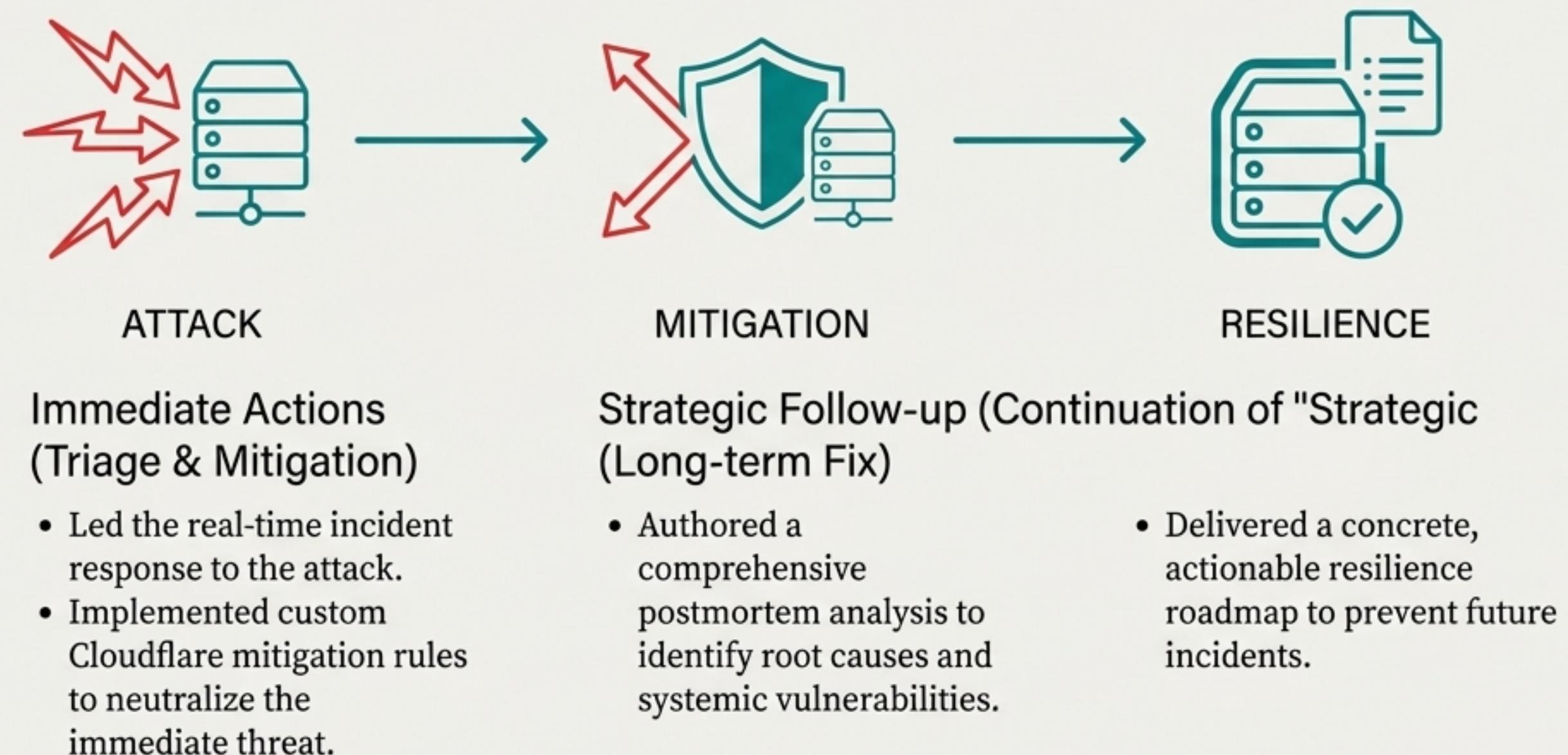


Case Study: From Incident Response to System Resilience

Brain Metrics Initiative (Consulting Engagement, 2022)

The Challenge

A multi-million-request DDoS surge threatened to take a critical system offline.



Case Study: Startup Engineering from 0-to-1

NannyML (ML Monitoring Startup, 2021-2022)

The Challenge

How does an early-stage, six-person founding team build a reliable product while simultaneously searching for product-market fit?

Key Contributions

- **Piloted** monthly ML monitoring prototypes, partnering with research to operationalise drift detection.
- **Shipped** containerised Python microservices on Amazon EKS, significantly improving deployment reliability.
- **Championed** investments in CI/CD, testing, and observability that became the foundation for customer trust.



Halved onboarding time for new customers.

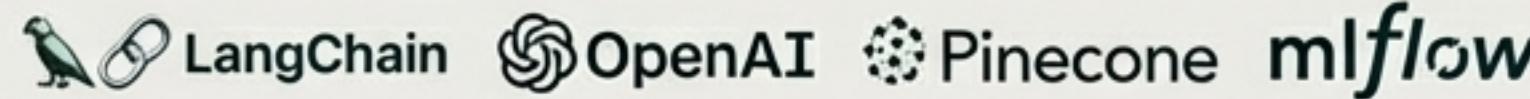


Underpinned the team's **first commercial deals**.

The Technical Toolkit

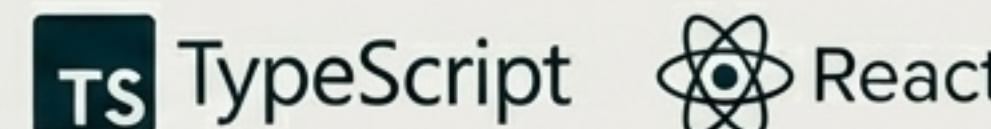
GenAI & MLOps

Generative AI Delivery

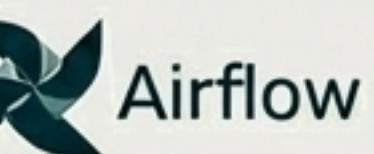
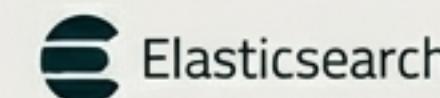


NLP PyTorch

Core Software Stack



Data Platforms & Cloud



Leadership & Delivery

- Stakeholder Alignment
- Executive Communication
- Cross-Functional Leadership
- Mentoring
- CI/CD Automation
- Microservices Architecture
- Observability
- Incident Response

A Foundation of Continuous Learning & Community



Education

MSc, Computer Science -
University of Edinburgh

*Thesis with distinction on
parallel MapReduce operators.*

BSc, Physics - University of
Athens



Professional Development

Athens NLP Summer School
(2019)

Big Data Architecture with
Apache Spark (2018)

Post-graduate coursework in
Electronic Automation &
Information Systems

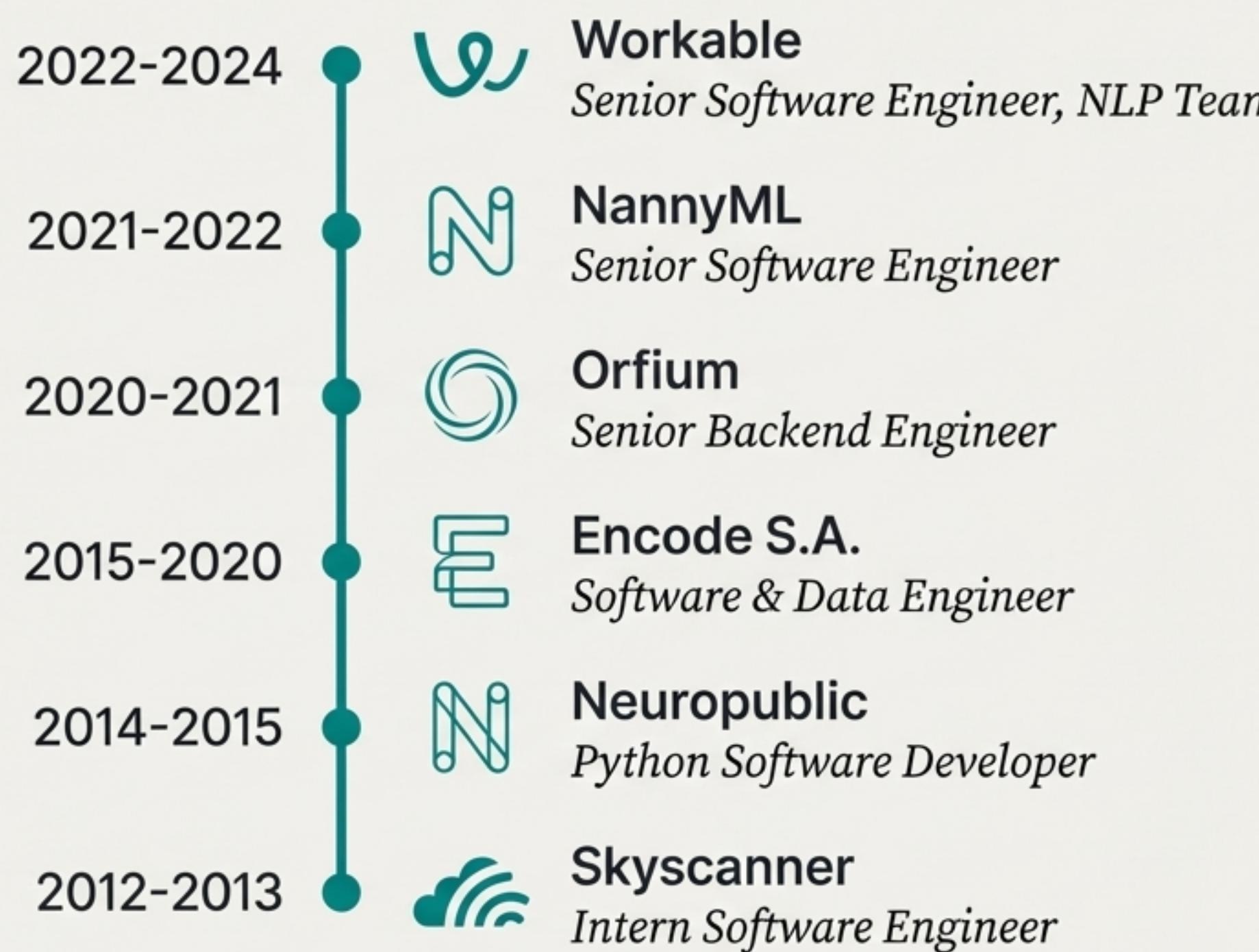


Speaking & Community

Speaker: Flash talk on
intrusion detection with NLP
at the Cybersecurity Social
event during ICLR 2020.

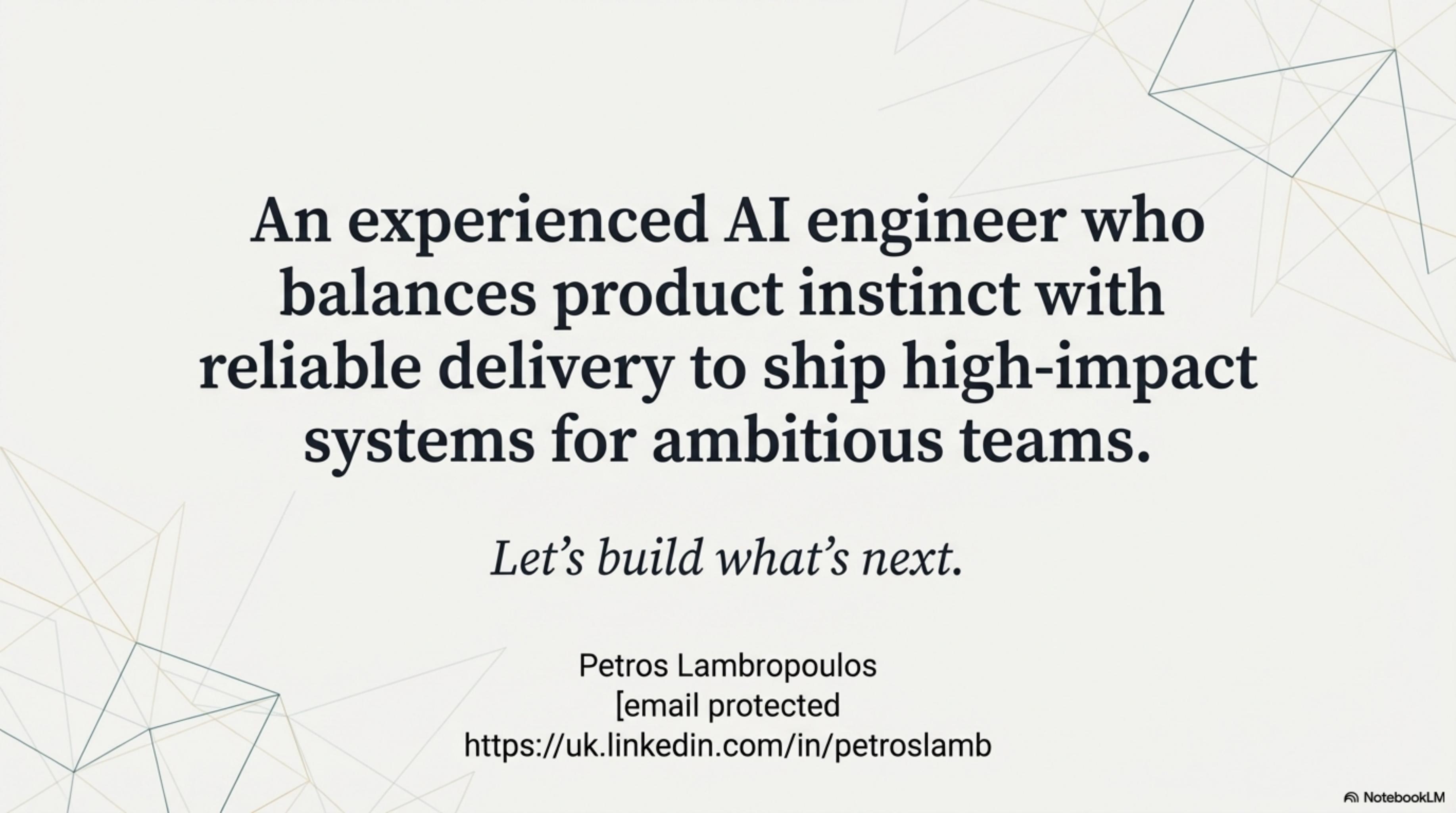
Active Member: Python and
NLP communities in Athens
and Edinburgh (AUEB NLP,
PyData Athens, Ministry of
Testing, etc.).

Professional Journey: A Path of Increasing Impact



Selected Consulting

- Dikaio.ai (2024)
- Brain Metrics Initiative (2022)
- Langaware (2021)
- Beat (2020)



An experienced AI engineer who
balances product instinct with
reliable delivery to ship high-impact
systems for ambitious teams.

Let's build what's next.

Petros Lambropoulos

<https://uk.linkedin.com/in/petroslamb>