# Hesam Pakdaman

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Backend engineer with experience in developing scalable distributed systems, focusing on fault-tolerant event-driven architectures. Enjoys hexagonal architecture and domain-driven design to build maintainable, adaptable software. Also has prior experience with artificial intelligence, specializing in machine learning with deployed models for predictive analytics, video segmentation, and real-time object detection.

## Programming languages

Go Python Lisp Rust

## EXPERIENCE



## **Backend Engineer**

Aug 2024—Feb 2025

Optimized legacy data flows and introduced an event-driven architecture for scalable telemetry processing. Restructured the codebase for better adaptability. Reduced integration test time and improved observability with structured error reporting. Authored ADRs to standardize logging.

(GCP) (gRPC) (PostgreSQL) (Pub/Sub)



## **Backend Engineer**

Mar 2023—June 2024

Designed and implemented new microservices, introducing event-driven patterns like the outbox pattern. Contributed to backend architecture discussions and feature development in the order flow, including order moderation and partial fulfillment handling.

k8s Kafka MongoDB PostgreSQL



#### Machine Learning Engineer

Apr 2022—Feb 2023

Budbee is a Swedish last-mile delivery company focusing on efficient deliveries for online shopping across Europe. I was part of the ML team, providing predictions and data insights to support various departments within the company.

LightGBM Metaflow MySQL PyTorch



Entecon

### Machine Learning Engineer

Feb 2021—Mar 2022

Entecon is a Swedish consultancy firm. I was contracted to work for Nielsen, a US-based company providing advanced video metadata solutions to leading media companies. My role was to assist the team responsible for video segmentation.

Matplotlib NumPy Pandas PyTorch



#### Machine Learning Engineer

Jan 2018—Feb 2021

Hired at DING as a consultant for Convini, a Swedish company providing workplace food solutions through self-service stations. I built a deep learning system using cameras mounted on fridges to detect products customers selected.

CUDA FLIR NumPy PyTorch

# **EDUCATION**



#### KTH Royal Institute of Technology

Civilingenjör i Teknisk fysik

- 2015—2018 MSc. Computer Science
- 2012—2015 BSc. Engineering Physics