

Vanja Smailovic

Lead AI Engineer | Applied AI Consultant

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Location: Greater Stockholm Area, Sweden

Summary

Product-focused **Lead AI Engineer** and **applied AI consultant** with 15+ years of experience building data, ML and AI products across fintech, payments, manufacturing, telecom and academia.

Combines LLM application development, data science and data engineering to turn ambiguous business problems into shipped AI product capabilities. Core applied AI work includes conversational AI, LLM agents and multi-agent workflows, RAG, text-to-SQL analytics, anomaly detection, NLP classification and credit risk modeling within machine learning. Strong Python background with hands-on ownership from problem discovery and technical design to implementation, iteration and delivery.

Pragmatic, entrepreneurial and commercially minded, with experience in high-growth, zero-to-one, B2B and SaaS environments, working closely with founders, senior leaders and customers. Startup and scale-up track record through **two successful acquisitions**: Instantor to Tink and Tink to Visa.

Experience since: 2011.

Main Competence Areas

- AI Engineering
- Applied AI for Product Development
- Data Science, Machine Learning and Product Analytics
- Data Engineering
- Python

Work Roles

- AI Engineer
- Data Scientist
- Data Engineer
- Engineering Manager

Professional Experience

Vanja Solutions AB, Freelancing and self-employed
Hybrid, Stockholm, Sweden
Sep 2026 – Present

> Applied AI/ML consulting focused on turning AI, ML and data capabilities into production systems.
> - LLM applications, RAG, agents, evaluation, and multimodal AI
> - Traditional ML
> - Rapid prototyping, validation, and productionization of data-driven use cases
> - Technical leadership, stakeholder alignment, and hands-on implementation
> - More details: www.vanjasmailovic.com

EQT, AI Engineering Consultant via Northbridge
Hybrid, Stockholm, Sweden
Jan 2026 – Sep 2026

Responsibilities

- Shaped CEO-office needs into concrete **AI product** workflows for daily briefing and email triage, working with the internal AI team, Product Manager, CTO and Chief of Staff

Achievements

- Built a CEO-facing generative AI Executive Assistant with **conversational** and **multi-agent workflows**, delivered from early requirements to active rollout in approximately 6 weeks
- Designed and implemented multi-agent workflows for information synthesis, email classification, prioritization, source-grounded summaries and task-relevant executive support
- Built a domain-expert evaluation framework for highly tailored multi-label email classification, including annotation guidelines, ground truth dataset, error analysis and iterative prompt and workflow improvements
- Achieved strong recall-weighted classification performance across the majority of the taxonomy, with parallel batches of 5 emails processed in **under 10 seconds**
- Implemented applied AI product safeguards, including structured outputs, source-linked summaries and human approval flows for state-changing actions
- Estimated impact: approximately **2.5 hours saved** in email reading time per week

Tech

- Python, Google ADK, Gemini Enterprise Agent Platform, Claude and Gemini LLMs, Vertex AI, LiteLLM, Pydantic, Gmail, Google Drive, Google Calendar and Slack APIs, MCP, Docker

PARENTAL LEAVE
Oct 2025 – Jan 2026

PAGOS, Lead Data Scientist and Engineering Manager
Fully remote from Stockholm, Sweden
Jun 2023 – Oct 2025

Responsibilities

- Led AI/ML product development in an early-stage US payments startup, with **leadership, management** and hiring responsibility for a team of 2-4
- Owned technical roadmap and cross-functional delivery for AI, ML and analytics capabilities in B2B customer-facing payments products
- Reported directly to the CPO in a successful early-stage US payments startup of approximately 30 employees, serving around 80 customers, including approximately 50 active customers

Achievements

- Shipped merchant payments monitoring and alerting using anomaly detection, the company's most technically complex product and second-largest product area, adopted by approximately 20 active customers

- Built a production, customer-facing invoice PDF parser using **OpenAI** Structured Outputs, multimodal GPT-4.1, OCR and PyMuPDF, reducing monthly manual extraction from approximately one FTE day to around 20 minutes **(24x reduction)**
- Designed schema validation and extraction-quality checks for invoice parsing, typically reaching approximately 99% accuracy with uncommon validation errors
- Co-developed a live customer-facing payments analytics **AI agent** using text-to-SQL, GPT-4o, tool calling, schema grounding and light RAG over company documentation

Tech

- Python, OpenAI API, GPT models, Gemini, Claude, agentic AI, generative conversational AI, document AI, PDF extraction, RAG, embeddings, FAISS, Chainlit, prompt engineering, structured outputs, tool calling, multimodal LLMs/VLMs, text-to-SQL, SQL, Redshift, Cube.js, Meta Prophet, ETL, anomaly detection

TINK, Senior Data Scientist
Hybrid, Stockholm, Sweden
Sep 2020 – Jun 2023

Responsibilities

- Built data science and credit risk capabilities supporting revenue-generating banking products
- Worked on customer-facing credit risk products using bank transaction data, analytics and machine learning
- Hired, onboarded and coached data scientists at the company level

Achievements

- Core team representing approximately **3%** of employees, responsible for **15%** of Tink's monthly recurring revenue
- Joined during **scale-up** phase at approximately 150 employees, growing to 400+
- **Successfully exited**, acquired by Visa

Tech

- Python, pandas, numpy, scikit-learn, Google BigQuery, Airflow, AWS Athena, AWS Glue (PySpark), AWS SageMaker, XGBoost, AWS

INSTANTOR, Senior Data Scientist
Hybrid, Stockholm, Sweden
Mar 2019 – Sep 2020

Responsibilities

- Drove technical aspects of the largest customer acquisition for the company to date
- Supported customer-facing pre-sales, technical onboarding and integration of newly acquired customers
- Developed a transaction tagging service using NLP techniques on bank transaction descriptions in AWS and Google Cloud
- Used XGBoost, BoostARoota feature selection and SHAP for credit risk modeling and model explainability

Achievements

- Improved the credit risk lifecycle for customers using bank transaction data, NLP classification and binary credit-default modeling, supporting more than 5 million credit decisions every year across 150 live customers and 13 markets
- Ranked the **second fastest-growing fintech** in Sweden in 2019 by the Financial Times
- Joined at a **startup** phase of approximately 30 employees
- **Successfully exited**, acquired by Tink

Tech

- Python, Jupyter Notebooks, pandas, scikit-learn, XGBoost, SHAP, NLP, BoostARoota, AWS, GCP, Docker, PostgreSQL, Scrapy, AWS QuickSight

SANDVIK Center of Digital Excellence (CODE), Data Scientist
Onsite, Stockholm, Sweden
Sep 2017 – Jan 2019

Responsibilities

- Data Scientist in Sandvik CODE, a “company within a company” focused on digital solutions for manufacturing
- Delivered data analysis, visualization and process-optimization projects for manufacturing use cases

Achievements

- Built an interactive geospatial sales-prioritization map from public US machine shop directory data, categorizing prospects by estimated commercial potential and supporting sales outreach planning
- Co-led a regression modeling project using 50+ real-time and historical sensor signals from tungsten-carbide metal-cutting insert production to identify key predictors of layer thickness, supporting quality-control improvements and €800k+ in estimated savings
- Completed onsite Google Cloud training in cloud architecture, big data and machine learning

Tech

- Python, Google Cloud Platform, Compute Engine, App Engine, BigQuery, Postgres and MySQL, Datastore, Firestore, Firebase Analytics, Google Analytics, Google Data Studio and Superset for visualization

ERICSSON, Research Engineer and PhD Candidate
Onsite, Zagreb, Croatia
Jun 2011 – Aug 2017

- **Project leader** for “SmartSocial,” a 2-year trilateral research project; secured grant funding, led a team of engineers and delivered 100% of project milestones

Technical Skills

AI Engineering

Python, Google ADK, OpenAI API, GPT models, Gemini, Claude, Vertex AI, LiteLLM, agentic AI, multi-agent workflows, generative conversational AI, document AI, PDF extraction, RAG, embeddings, FAISS, Chainlit, Elasticsearch, prompt engineering, structured outputs, tool calling,

multimodal LLMs/VLMs, text-to-SQL, Model Context Protocol (MCP), LLM evaluation, prompt and workflow evaluation.

Product and Backend Development

Python, Cursor IDE, uv, FastAPI, Uvicorn, Flask, Pydantic, Docker, GCP Cloud Run, SQLAlchemy, Redis, pytest, unittest, AI-assisted software development. Hands-on use of product delivery and observability tooling including Datadog, Grafana, GitHub Actions and CircleCI.

Data Science and Machine Learning

pandas, scikit-learn, XGBoost, Meta Prophet, SHAP, NLP, anomaly detection, credit risk modeling, feature engineering, binary classification, statistical analysis, model explainability, Jupyter, matplotlib, plotly, seaborn, marimo, text, tabular and time-series data.

Data Engineering and Analytics

SQL, BigQuery, Redshift, Amazon Athena, Presto, AWS Glue, PySpark, Apache Airflow, ETL data pipelines, analytics engineering. Familiarity with Cube.js semantic layer and Dask.

Other

Jira, Linear. Figma collaboration. Basic exposure to CopilotKit, LangSmith and LangChain through AI-assisted prototyping and exploratory use.

Education

University of Zagreb, Faculty of Electrical Engineering and Computing

- 2011 – 2016 PhD degree focused on social network analysis, graph algorithms, statistical validation and data-processing methods for measuring user influence
- 2010 Erasmus exchange student at AAU Copenhagen
- 2009 – 2011 MSc degree
- 2006 – 2009 BSc degree

Awards and Honors

- 2018 Academic achievements: published 8 peer-reviewed scientific papers, including an article in the prestigious scientific journal Complexity
- 2016 Honorary Doctoral Commencement Speaker at the University of Zagreb
- 2016 Completed PhD studies within the top 10% of doctoral candidates in 4.5 years while working full-time
- 2016 Deezer Music Hackathon Winner
- 2013 Ericsson Global Innovation: Competition Winner within the Data Monetization category