

Paul-Louis Pröve

📍 Hamburg, DE ✉ mail@plpp.de 🔗 https://pietz.ai 🌐 plpp 📧 pietz

Paul is a seasoned AI engineer and strategic consultant with 8 years of experience in the field. He specializes in helping organizations leverage artificial intelligence to drive innovation. With extensive experience in GenAI, strategy consulting and cloud-based solutions, he has guided projects across multiple industries and company scales. Paul has led numerous initiatives ranging from Computer Vision research to scaling machine learning applications for enterprise use. His project portfolio includes developing voice assistants, complex agentic systems, autonomous drones, and predictive maintenance systems. Previously, Paul served as the CEO and Head of AI at Tensora GmbH, further refining his strategic consulting skills. By combining deep technical expertise with business acumen, he enables organizations to effectively implement AI strategies and achieve transformative results.

Experience

AI Engineer & Strategy Consultant

August 2024 — Present

Freelance

- Strategy consulting on GenAI, data & cloud related matters
- Concept & implementation of state-of-the-art AI solutions
- Clients ranging from startups to DAX40 and S&P100 companies

Founder & Director

January 2022 — August 2024

Tensora GmbH

- Built a lean company focused on AI products and consulting expertise
- Strategy consulting on AI, data & cloud related matters
- Concept & implementation of state-of-the-art AI solutions

Senior Data Scientist

July 2018 — December 2021

Lufthansa Industry Solutions

- IT Consultant for data, AI, NLP, and computer vision
- Led project teams with up to 5 people
- Developed proprietary suite of AI services and products

Consultant Data & AI

October 2017 — June 2018

PwC

- Strategy Consultant with focus on AI
- Helped customers to use AI effectively
- Implemented test automation for data quality assurance

IT System Analyst

October 2015 — June 2017

Hapag-Lloyd

- Development of applications for our in-house ERP system
- Automation of workflows using Excel macros
- UX and UI redesign of customer quotation documents

Projects

AI Recruitment Consulting

October 2024 — Present

Collaborating with the CPO of an international freelancer platform to design and implement AI solutions that streamline and accelerate recruitment processes.

- Technologies: Python, OpenAI, FastAPI, Voice Agents, Agentic RAG

AI Innovation Lab

May 2023 — Present

Collaborating with the CTO of a major U.S. corporation to develop AI prototypes and applications for various subsidiaries, focusing on rapid prototyping and tailored AI solutions for diverse business needs.

- Technologies: Python, OpenAI, GPT, FastAPI, Cognitive Search, Vector Stores, Voice Agents, Agentic RAG

Recruitment Tools

October 2023 — August 2024

Developed a comprehensive suite of AI tools for the recruitment industry, including intelligent talent matching, automated screening, and LLM-powered candidate evaluation systems.

- Technologies: Python, Azure, OpenAI, GPT, AI Search, Chatbots, Vector Store

Crowd Counting

September 2023 — January 2024

Developed an AI solution for accurate crowd counting in high-density settings for clients in professional sports and music festival industries, with cloud-based deployment and real-time analytics.

- Technologies: Python, PyTorch, Computer Vision, CNNs, High-Density Object Detection, CCTV Integration

GPT Finance Agent

October 2023 — November 2023

Built an automated GPT agent with multi-source data access (databases and web) to solve complex customer financial queries through intelligent information synthesis.

- Technologies: Python, OpenAI, GPT, Langchain, SQL, Vector Store, Agents

Data Copilot PoC

July 2023 — October 2023

Developed a cognitive search engine leveraging OpenAI GPT, combining vector stores and keyword search to provide intelligent answers about internal company documents.

- Technologies: Python, LLM, GPT, Langchain, Cognitive Search, Vector Store

Vision Quality Control

April 2023 — June 2024

Created a Computer Vision framework and service enabling automated visual quality control on manufacturing shop floors with real-time defect detection.

- Technologies: Python, MLFlow, PyTorch, Azure ML, Azure Functions, Object Detection, DevOps, CI/CD, Git

Global MLOps Platform

September 2022 — July 2023

Developed a global, AI-Act-compliant MLOps platform using AzureML and Databricks for scalable ML model deployment and governance.

- Technologies: Python, Databricks, MLFlow, Azure ML, CosmosDB, APIM, Flask, Azure DevOps, Kubernetes, CI/CD, Git

ChatGPT NLP PoC

July 2023 — August 2023

Built an intelligent chatbot using OpenAI API that automatically transcribes interviews and generates comprehensive candidate evaluation reports.

- Technologies: Python, Azure OpenAI API, ChatGPT, LLMs, Langchain, Question Answering, Speech-to-Text

Data Cleaning Platform

January 2022 — April 2023

Created a no-code data exploration and data cleaning platform that accelerates the work of Data Analysts and Data Scientists

- Technologies: Python, FastAPI, Polars, Pandas, Azure Functions, Azure Static Web Apps, CosmosDB, JavaScript, Svelte, SvelteKit, Unovis

AI Service Cloud Platform

January 2022 — June 2022

Designed and built a modern machine learning architecture for an offering of different AI services in the Azure cloud.

- Technologies: Python, Azure ML, Azure Functions, CosmosDB, Blob Storage, FastAPI, Databricks, MLFlow, CI/CD, Git

Customer Lifetime Value

January 2022 — May 2022

Analyzed large amounts of customer data, built dashboards and predicted customer value & customer churn over time.

- Technologies: Python, scikit-learn, lifetimes, AWS, Redshift, dbt, Tableau

Flight Delay Prediction

September 2021 — December 2021

Data Science lead in a team of 4 to build a prototype web app that predicts potential flight delay and customer impact.

- Technologies: Python, Monte Carlo simulation, AWS Lambda, DynamoDB

Food Waste Reduction

May 2021 — December 2021

Built an AI recommender system that bridges the gap between supply and demand in the food industry.

- Technologies: Python, node2vec, collaborative filtering, CI/CD, Git

Predictive Maintenance

March 2022 — April 2022

Project lead for building an early warning system for manufacturing machines based on time-series models

- Technologies: Python, statsmodels, Pandas, scikit-learn

Time Series Platform

January 2021 — September 2021

Built a Time-Series-Forecast platform that retrains different models on a regular basis and serves the best model at scale.

- Technologies: Python, Prophet, statsmodels, ARIMA, MLflow, Hyperopt

COVID19 People Counting

September 2020 — August 2021

Project lead of 3 for a COVID-19 computer vision solution to count people in public places and measure their distance

- Technologies: Python, PyTorch, OpenCV, FastAPI, CI/CD, Git, AWS

Autonomous Drone

May 2020 — July 2021

Built the Computer Vision part of an autonomous drone that detects and classifies damages in high resolutions images.

- Technologies: Python, TensorFlow, OpenCV, Image Segmentation, Azure Functions, Blob Storage, CosmosDB

Education

University of Illinois

May 2019 — May 2021

M.Sc. in Data Science (GPA 3.83)

Quantic School of Business

May 2018 — March 2019

M.B.A. in Business Administration (90%)

Fachhochschule Wedel

April 2014 — September 2017

B.Sc. in Computer Science (B+)

Languages

German: Native

English: Fluent

Skills

Coding: Python, JavaScript

AI Services: Providers: OpenAI, Anthropic, Bedrock, VertexAI, Voice: Realtime API, STT, TTS, Twilio, Agents: PydanticAI, LangGraph, Swarm, Embeddings: OpenAI, HuggingFace, BCE, Vector Stores: Qdrant, PGVector, Pinecone

Cloud Services: Azure: Functions, AI Studio, AI Search, Cosmos, App Service, AWS: Bedrock, SageMaker, EC2, Lambda, Redshift, Dynamo, GCP: VertexAI, Firebase, Cognitive Services, Databricks: DS & ML Workspaces, MLFlow

Developer Tools: Git, CI/CD, Docker, Terraform

Project Tools: SCRUM, Kanban, Jira, Confluence

Backend & API: FastAPI, Node, MCP Servers & Clients

Frontend & Dashboard: HTMX, Svelte, Streamlit, Gradio