

Dan Stativa | Senior AI/Backend Engineer

Bucharest – Romania

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Profile

Senior AI and backend engineer with 10+ years building production platforms, search systems, data pipelines and ML-powered products. I work best where backend reliability meets applied AI: GenAI/RAG, ad optimization agents, semantic search, observability and cloud data systems.



Core Skills

AI/ML: Python, PyTorch, PySpark, Scala/SparkML, LangChain, RAG, vector search, Google Cloud Dataproc

Backend: PHP (Laravel, Symfony), Golang, REST APIs, MySQL, PostgreSQL, MongoDB, Linux

Cloud/Data: Airflow, BigQuery, GCP Cloud Run, Docker, Kafka, RabbitMQ/SQS, Redis, Datadog

Product UI: JavaScript ES6, TypeScript, React, Redux, HTML5

Experience

Cedara

AI Engineer

Carbon monitoring SaaS for digital advertising.

– **Production AI:** Took an ad optimization agent from PoC to production and connected ML decisioning to programmatic bidding workflows. *Python, PyTorch, Scala, SparkML, Dataproc, OpenX API.*

– **Data Platform:** Maintained analytics pipelines for carbon monitoring and reporting across product and data workloads. *Laravel, Livewire, PostgreSQL, Airflow, GCP, BigQuery, Cloud Run.*

– **Training Data:** Built social media crawlers to expand model training datasets and support experimentation. *Python.*

Bucharest

Jul 2024 – Present

Pentalog

Senior Backend Engineer

Consultant for a major European investing platform, working on a service-oriented architecture.

– **Quality:** Maintained 99% unit test coverage and supported bi-weekly releases with 0% error rate through a disciplined TDD workflow.

– **Reliability:** Added Datadog observability and delivered backend services in a high-reliability financial product environment. *PHP (Laravel), MySQL, Docker, Redis, Kafka.*

Bucharest

Sep 2021 – Jul 2024

IsoSkills

Senior Backend Engineer

Backend engineering for Ezugi, a live iGaming provider.

– **Scalability:** Re-architected reporting reads onto a replica to reduce primary database load and improve operational headroom. *PHP (Symfony, API Platform), MySQL, Docker.*

Bucharest

Jun 2020 – Sep 2021

Ensysco

Fullstack Engineer

Delivered an admin platform for gas and energy providers with complex tariff logic and operational workflows. *React, Redux, PHP (Symfony, API Platform), MySQL/MariaDB, Docker.*

Bucharest

Jun 2019 – Jun 2020

Bandai Namco Entertainment Romania

Backend Engineer

Built a RESTful API from scratch for the mobile game *Retro Wonder Park*, supporting backend gameplay and integration requirements.

Bucharest

Oct 2018 – Mar 2019

eMAG

Senior Backend Engineer - Search ML Systems

Bucharest

Apr 2017 – Jun 2018

Search team for Romania's largest e-commerce platform.

- **Search Platform:** Helped extract the search API from the monolith into a dedicated Apache Solr microservice.
- **AI/ML Innovation:** Won the Future Hacks 2.0 Innovation Award for predicting user funnel stage from access logs. *R, Python.*
- **Test Acceleration:** Parallelized regression testing and reduced suite runtime by 90%. *Docker, SeleniumGrid.*

Pathwwway

Web Developer

Bucharest

Mar 2016 – Apr 2017

Promoted from critical fixes to core development on a gaming platform; built player-tracking capabilities with the BI team and trained QA engineers in test automation. *Java, Selenium, Git.*

XLTEAM

Web Developer

Bucharest

May 2014 – Sep 2015

Delivered outsourcing projects including Rolii.ro, a legal portal indexing 5M+ court decisions with Elasticsearch, and Multibonus.ro, a MOL loyalty platform integrated with banking backend flows.

Various Companies

Junior Web Developer

Bucharest

Nov 2013 – Sep 2015

Early career roles at WebVenture, Customsoft (evomag.ro) and The Shop Page. *PHP, Agile.*

Selected Projects

AI-first semantic fragrance search

[scentum.space](#) | [danstativa.dev/scentum.html](#)

Scentum

2026

Semantic fragrance discovery product that translates natural-language and voice intent into vector-based search, filters and recommendations.

- **Capability:** Modeled perfumes with a 5-dimensional ScoreVector covering authenticity, projection, longevity, complexity and versatility, enabling ranked similarity search beyond keyword matching.
- **Architecture:** Combined **Scrapy**, **Zyte Cloud**, **Claude Haiku**, **MongoDB** and **React/TypeScript** for data collection, semantic enrichment and AI-guided discovery.

RAG GenAI support assistant

[danstativa.dev/whatsapp-chatbot.html](#) | [full project brief](#)

WhatsApp AI Chatbot

2026

RAG-based support assistant that turns FAQ pages, documentation and support articles into grounded WhatsApp conversations.

- **Capability:** Retrieves trusted context per customer message, generates concise answers and escalates when confidence, policy or business context requires human support.
- **Architecture:** Connects the **WhatsApp Business API** to predefined **n8n** workflows, implementing RAG through question-and-answer embedding comparison with a similarity threshold that avoids responding to unrelated questions.

Education

The Faculty of Mathematics and Computer Science

Master of Computer Science - Data Science

University of Bucharest

2024 – Present

Social Media Messages Survival Models – survival analysis of Telegram message longevity using Cox Proportional Hazards in Python, with terabyte-scale data processed through streaming parsers and NumPy/Pandas.

The Faculty of Mathematics and Computer Science

Bachelor of Computer Science

University of Bucharest

2013 – 2016

Predicting Conversions in Keyword Based Online Advertising Systems – predictive analytics for PPC keyword performance using R and a Python web crawler.

The Faculty of Philosophy

Bachelor of Philosophy, Specialization: Moral and Political Philosophy

University of Bucharest

2005 – 2009

Business Ethics Between Virtue and Profit – explored sustainability as a third dimension beyond the classical trade-off between virtue and profit.

Languages

Romanian: Native speaker

English: Advanced

Con conversationally fluent