

# DR. BRANISLAVA ŠANDRIH TODOROVIĆ

Senior Data Scientist • NLP & AI Specialist • Consultant & Educator

Belgrade, Serbia • [branislava.sandrih@gmail.com](mailto:branislava.sandrih@gmail.com) • [LinkedIn](#) • [Google Scholar](#) • [GitHub](#) • [Website](#)

## PROFESSIONAL SUMMARY

---

Doctor of Computer Science with 10+ years of experience in machine learning, NLP, LLM-based solutions, and data-driven insight delivery. Proven track record of translating complex analytical findings into clear, actionable stories for executive stakeholders. Expertise in text analytics, sentiment analysis, predictive modelling, and advanced statistical methods — combined with team leadership of 10+ professionals and deep research credentials (30+ peer-reviewed publications). Adept at operating in fast-paced, ambiguous, global environments and at championing data-driven culture across organisations.

## CORE COMPETENCIES

---

- Text Analytics & NLP (LLMs, RAG, NER, Sentiment, Classification)
- Predictive & Statistical Modelling (regression, clustering, significance testing)
- Workforce / Talent Analytics & Insight Delivery
- Research Design & Data-Driven Storytelling
- Python (PyTorch, TensorFlow, scikit-learn, spaCy, LangChain, Pandas)
- Data Visualisation: Seaborn, Matplotlib, Dash, Streamlit, Gradio, PowerBI (familiar)
- Cloud & DevOps: Azure ML, Docker, Git, Ubuntu/Linux
- Team Leadership, Stakeholder Communication, Global Collaboration

## PROFESSIONAL EXPERIENCE

---

**Senior Data Scientist** | [NLB DigIT, Belgrade](#) 2022 – 2023 & 2025 – present

Delivering NLP-powered analytical solutions for all banks from the NLB Group, translating complex text data into actionable insights for business stakeholders.

- Developed end-to-end text analytics pipelines for the Bank's Contact Center: sentiment analysis, topic classification, and priority scoring for client emails in Slovenian; voice transcription and sentiment tagging.
- Built and evaluated LLM-based zero-shot, few-shot, and RAG systems — improving classification accuracy and scalability over legacy models using both commercial APIs and local LLMs (Ollama, Azure AI Foundry, OpenAI).
- Created RAG-powered knowledge bases for internal documentation and client-facing leasing assistant; built BERT-based QA bots for annual reports and client FAQs.
- Contributed to an early warning system monitoring stock market risks and a 5-class contract classification system.
- Consistently communicated complex analytical findings to non-technical leadership via clear narratives and visual dashboards (Streamlit, Gradio, Dash).

**Data Science Team Lead** | [NLB DigIT, Belgrade](#) 2023 – 2025

Led the data science function, setting strategy and driving data-driven culture across the organisation.

- Managed a 10+ member data science team: set annual project strategy, defined digital competencies, and ran recruitment, onboarding, and capability development.
- Designed and presented prototypes, MVPs, and AI products to senior stakeholders and C-level executives — translating analytical complexity into compelling business cases.
- Collaborated with engineers, product managers, and business clients across geographies to scope and deliver analytics initiatives from design to production.
- Organised student internship programmes and internal training seminars, advancing team skills in ML and NLP.

## Assistant Professor & Researcher | [University of Belgrade](#) 2015 – 2022

- Led NLP research: sentiment analysis, abusive speech detection, NER for Serbian, authorship identification, bilingual terminology extraction — with 30+ peer-reviewed publications.
- Taught 15+ courses across BSc, MSc, and PhD levels including NLP, Machine Learning, Information Retrieval, and Programming.
- Supervised master's and PhD students; served on defence committees and international programme committees (RANLP, LREC, COLING).
- Visiting lecturer (EMTTI programme) at University of Wolverhampton, UK & University of Malaga, Spain (2021); invited seminar speaker at University of Wolverhampton (2018) and TEI Athens (2019).
- Collaborated with researchers across Europe via COST research networks (CA18231, CA16204, CA16105).

## Java Backend Developer (Internship) | [SAP SE, Walldorf, Germany](#) 2014

- Contributed to KapaflexCy workforce planning application; invented the shift management scoring logic, improving scheduling transparency — directly relevant to workforce analytics.

## ADDITIONAL ACTIVITIES

---

- Co-founder, [socratize.io](#) — AI-powered learning game/platform startup, leveraging latest LLM technologies and agentic systems.
- Founder, [AIkademija](#) — public AI literacy initiative; delivering lecture series on AI at a local City Library (2025–2026) and online.
- Panelist, [Women in Data Science \(AWDS\) & HTEC](#) event "Data Chaos to Data Clarity" (2026).
- Top 10 finalist, [Female Engineer of the Year initiative](#) (2025).
- Speaker, [Data Science Conference Belgrade: NLP in AI-powered banking \(2023\)](#); [RANLP Conference, Bulgaria \(2023\)](#); and many more.

## EDUCATION

---

### Doctor of Computer Science (summa cum laude) | [Faculty of Mathematics, University of Belgrade](#) 2015 – 2020

Thesis: [Impact of Text Classification on Natural Language Processing Applications](#).

Awarded by the [Serbian Academy of Sciences and Arts](#) (2021).

### Master of Mathematics (magna cum laude, 9.81/10) | [Faculty of Mathematics, University of Belgrade](#) 2014 – 2015

### Bachelor of Mathematics (magna cum laude, 9.48/10) | [Faculty of Mathematics, University of Belgrade](#)

2010 – 2014

## SELECTED PUBLICATIONS (30+ peer-reviewed works — full list on website)

---

- [Neural Natural Language Generation: A Survey](#). Journal of Artificial Intelligence Research, 2022.
- [Corpus-Based Bilingual Terminology Extraction in Power Engineering](#). Terminology, 2022.
- [Three Approaches to Client Email Topic Classification](#). RANLP, 2023.
- [Development and Evaluation of Serbian Named Entity Recognition Systems](#). RANLP, 2019.
- [Abusive Speech Detection in Serbian using Machine Learning](#). NLP & AI for Cyber Security, Lancaster, 2024.

Full list: [branslava.github.io/#publications](#) • DBLP: [dblp.org/pid/219/5368](#) • Google Scholar: [scholar.google.com](#)

## LANGUAGES

---

**Serbian** (native) **English** (C1 — excellent written & verbal) **Spanish** (C1) **German** (B1)