

LUCAS BIAGETTI

Software Engineer – AI Specialist

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SUMMARY

AI Specialist with over 3 years of experience in developing and optimizing **Transformer-based models, RAG pipelines**, and AI-driven business applications. Proven expertise in **Python, PyTorch, LangChain and Java**, with a strong focus on solving complex problems and delivering scalable, high-performance solutions.

SKILLS

AI technologies: Python | Transformers | PyTorch | LangChain | Hugging Face Libraries | RAG Pipelines | Prompt Engineering | PostgreSQL (pgvector) | Cost and Performance Optimization | Document Parsing and Text Processing

Soft skills: Effective communication | Problem-solving | Team collaboration | Adaptability to new technologies | Continuous learning and innovation | Teaching and mentorship capabilities

Languages: Spanish (Native) | Italian (C1) | English (B2)

relevant PROFESSIONAL EXPERIENCE.

Freelance - AI Architect & Developer

Sep 2024 – Nov 2024

Created an AI chatbot for children's educational assistance using proprietary models, RAG, and prompt engineering.

Developed an automatic question generator to enhance interactivity.

Designed a custom text processor and implemented document parsing to boost retrieval accuracy.

Configured PostgreSQL (pgvector) for embedding storage, optimizing prompts for higher-quality responses.

Confidential Project - AI project lead

March 2024 – Nov 2024

Designed a custom generative Transformer model to map complex financial database relationships.

Optimized training processes, reducing RAM usage by 94% and training time by 85% with architecture and code improvements.

NeuralSoft - AI Specialist

Dec 2022 - Present

Built and deployed a custom RAG system for a chatbot achieving 93% response accuracy in specific use cases.

Enhanced system performance with re-retrieval strategies and optimized prompts.

Integrated scalable AI solutions used by 800 clients in collaboration with operations and design teams.

Developed time series forecasting and sentiment analysis systems for business applications.

NeuralSoft - Java Developer

Dec 2021 - Dec 2022

Improved AI integration in business applications, reducing processing costs by 80%.

Delivered scalable solutions for a broad client base in partnership with infrastructure teams.

Created an automatic anomaly detection system to optimize business processes.

University Professor at UGR (Argentina)

Jan 2023 – Jan 2024

Taught at the Data Science career, specializing in Introduction to Scientific Thought.

PERSONAL PROJECTS.

PoetGPT [\[View Demo\]](#): Generates Spanish poetry using EleutherAI's Pythia model.

BorgesBot [\[View Demo\]](#): Produces text that imitates Jorge Luis Borges' literary style.

GuessTheWord [\[View Demo\]](#): A game where users guess a secret word using vector similarity hints.

Formal **EDUCATION**

System Analyst – UNR (66% completed)	2020-2023
<i>*Program paused to focus on advanced AI specialization and professional development.</i>	
Master in Pedagogical Sciences. Università della Calabria, Italy (<i>Mark: 110 with honors</i>)	2019-2020
Bachelor and professor in Educational Sciences. National University of Rosario, Argentina (<i>Mark: 8.45/10</i>)	2013-2018

COURSES

Coursera.org: Natural Language Processing with Attention Models	2024
DeepLearning.ai: Prompt Engineering for software developers and LangChain for LLM development	2023
Oracle Next Education: Data Sciences, and Oracle Cloud	2022-2023
OtherCourses: Spring (2022), Databases (2022), Testing (2022), Java (2021), JavaScript (2020), and Python (2020).	

OTHER PROFESSIONAL EXPERIENCES

University Professor and social researcher at UNR (Argentina) and UNICAL (Italy)	2015 – 2024
Group coordination at Natural sciences Museum	2018
Mathematics Olympiad Coach at UNR and ISP (Arg)	2013 – 2016