SALVADOR KARAKACHOFF

Advanced Computer Engineering student with experience in Backend Development, Data Engineering, and Infrastructure. **Hands-on experience in production environments with large-scale clients**. Interested in Data Engineering and Machine Learning applied to real-world scenarios (e-commerce, sports, finance), High Performance Computing (HPC), parallel systems, and scalable development.

EXPERIENCE

DATA ENGINEER | Club Estudiantes De La Plata | April 2025 - Present

- Built a Data Lakehouse to unify over 4 TB of heterogeneous information.
- Normalized multiple data sources using ETL pipelines for Generative AI and LLM solutions.

BACKEND DEVELOPER & AI ENGINEER | LitioSoft | July 2025 – Present (Remote)

• Developed an **SQL Agent** with WhatsApp and Slack interface to automate HR tasks for a company with **+3000 employees**, using RAG, CAG, and Prompt Engineering techniques. **Technologies**: Python (FastAPI, LangChain, ChatGPT API, SQLAlchemy), Go, Docker.

INFRASTRUCTURE TECHNICIAN & IT SUPPORT | Boartech SRL | Oct 2024 – Feb 2025

• Managed networks and IT systems for **corporate clients (YPF, UNLP, Cristal Cash)**. **Technologies**: Bash, Proxmox, Networking Protocols, advanced OS knowledge.

NETWORK ADMINISTRATOR & IT SUPPORT | Facultad de Ingeniería, UNLP | Apr 2022 – Present

• Network administration and maintenance with +2000 simultaneous devices.

FREELANCE | Feb 2022 - Jul 2025

- Obrabierta Construcciones S.A: Consulting, IT Support, and corporate email administration.
- **IDYTAC S.A:** Consulting, Server implementation for a medical imaging system, and development of corporate website with newsletter and subscriptions.

EDUCATION

• Computer Engineering - Faculty of Computer Science & Engineering (UNLP) | 2022 - 2027 (ongoing)

ACHIEVEMENTS & PROJECTS

International Collegiate Programming Contest (ICPC)

• Qualified for international stages in 2024 and 2025.

Formula 1 Data Mining - 2025

• Analysis of historical F1 data to train predictive models for classification, race results, and dropout probability, achieving 90% accuracy — high given the sport's unpredictable nature. **Technologies**: Python, Pandas, Scikit-learn, XGBoost, Matplotlib.

Particle Simulator - 2024

• Developed an interactive physics engine using Verlet integration, simulating **+100,000 particles** with links and springs. **Technologies**: C++ (OpenGL), Parallel Algorithms, Applied Mathematics & Physics.

SKILLS

- Data & AI: Python (FastAPI, PyTorch, Pandas, NumPy, Scikit-learn, XGBoost, Matplotlib/Seaborn, Jupyter), SQL/NoSQL, ETL, Machine Learning, VectorDB, LangChain, LLMs (OpenAI API, Google API, Hugging Face).
- Infrastructure & Development: Java (Spring Boot), Go, C++, Rust, Docker, Linux, Bash, Git, REST APIs, CUDA, OpenCL, OpenGL, Assembly, Parallel Algorithms, HTML, CSS, JavaScript, TypeScript, React, Next.js, Angular, Astro, Node.js.
- Languages: Spanish (Native), English (Advanced C1).