Danko Lobos Bustamante

dankollb@outlook.com – linkedin.com/in/dankollb/ – Santiago, Metropolitan Region, Chile.

Software Developer

Graduate in Computer Science Engineering with strong knowledge of IT project management, web application development, data science, artificial intelligence (AI) and automation. At internship, developed AI solutions in computer vision for industrial safety. Over three years of experience in software development using multiple programming languages, including Python, Java, and JavaScript. Over a year of experience in support engineering and IT system administration with focus in troubleshooting, technical assistance, database management, network and system monitoring.

Education

Metropolitan University of Technology from the State of Chile – Santiago, Chile.
Computer Science Engineering – Class of 2026.
- Academic Degree: *Bachelor of Science in Computer Science*.
- 4 years as Teacher Assistant for the Computer Science Department.
- 1 paper accepted in the ACI'22 conference and published in the ACM journal.

Work Experience

Deliryum.AI – Santiago, Chile.
AI Developer – October/2024 to December/2024.
- **Data management and preprocessing**: Expanded training dataset through ETL processes on large image datasets using specialized software. Built automated Python data pipelines to optimize image collection and validation, significantly reducing manual effort and improving dataset consistency.
- **Model development, testing and optimization**: Evaluated model performance using various metrics, fine-tuned hyperparameters, and debugged issues to ensure accuracy, efficiency, and reliability. Improved object detection accuracy by 30% through iterative model optimization and data augmentation techniques.
- **Integration and deployment**: Designed and implemented a new database and RESTful API with multiple endpoints from scratch. Developed web application functionality to visualize AI model outputs and performance data, enabling real-time insights and improved user interaction.

DIRECTIC Technological Solutions – Santiago, Chile.
Support Engineer – January/2022 to March/2024.
- **Client communication**: Provided technical support and troubleshooting for 1,000+ users across 100+ companies in the Chilean mining industry through online and remote assistance.
- **Database management**: Performed database backups, data recovery and data imports/exports.
- **System and network monitoring**: Monitored the performance and maintained their configurations.
- **Quality assurance**: Executed and documented QA tests to ensure software reliability and performance.
- **Documentation**: Wrote and maintained technical documentation, including issue reports, resolutions, and standard operating procedures.

Technologies

- **Programming Languages**: Python, C/C++, Java.
- **Web Development**: Angular, Django, Vue, HTML, CSS/SCSS, JavaScript, TypeScript, XML, XSLT.
- **Cloud Computing**: AWS, GCP, IBM Cloud.
- **Database Management**: PostgreSQL, MySQL, MS SQL Server, MongoDB.
- **Operating Systems**: Windows, Linux (Debian – RHEL – Fedora), macOS.
- **Other**: Git (Github – GitLab), Node.js, Docker, Postman.

Technical Skills

- Agile Project Management and Development.
- Earned Value Methodology (EVM).
- Object-Oriented Programming (OOP).
- Test-Driven Development (TDD).
- Software Design Patterns (SDP).

Certified Courses

- *Project Management and Agile Methodology Fundamentals*.
    - Santander Open Academy (2025).
- *Generative AI Professional Essentials*.
    - Microsoft LinkedIn Learning (2025).
- *Introduction to Cloud*.
    - AWS Academy (2024).
- *Engineering Operations Technician*.
    - AWS Academy (2024).

Personal Abilities

- Collaboration.
- Effective Communication.
- Adaptability.
- Problem Solving.

Languages

- Spanish – Native.
- English – B2 Level.

Research

1. Jérémy Barbay, Daniel Freire-Fernández, and Danko Lobos-Bustamante. 2023. *Popping Up Balloons for Science: a Research Proposal*. In Proceedings of the Ninth International Conference on Animal-Computer Interaction (ACI '22). Association for Computing Machinery, New York, NY, USA, Article 12, 1–5. https://doi.org/10.1145/3565995.3566029.