Julián Camilo Rivera Monroy

Github Profile

Profile

Systems and Computer Engineer from Universidad de los Andes, Colombia, with hands-on experience in machine learning, data pipelines, cloud computing (AWS & GCP), and full-stack development. Passionate about building scalable AI-driven applications and contributing to research-oriented, high-performance engineering teams. Skilled in problem-solving, teamwork, and ownership, with a strong commitment to excellence and continuous learning.

Employment History

2025 Junior Developer, Quality Software SAS, Bogotá

FullStack developer and founding engineer for a new company product. Designed and implemented solutions using React, TypeScript, Django REST, PostgreSQL, and AWS. Gained experience in software architecture, Git flows, and project organization, with ownership of end-to-end development and deployment workflows.

2023 Software Engineering Intern, BTG Pactual, Bogotá

Developed and deployed a data-driven full-stack web platform integrating AWS Lambdas, serverless microservices, and PostgreSQL. Designed and optimized data pipelines for information retrieval and transformation, ensuring secure, scalable APIs. Strengthened expertise in cloud-native engineering and enterprise data management.

Education

2025 Systems and Computer Engineer, Universidad de los Andes, Bogotá

Systems and Computer Engineer from Universidad de los Andes, Colombia. Recipient of the "Quiero Estudiar" scholarship. Completed a degree project within the Smart Campus initiative, focused on mobile applications, data processing and storage automation, Big Data, and machine learning.

Projects

Sep 2025 – Stock Investment wep page, Personal Project, Github Repository

Oct 2025 A full-stack application that aggregates analyst recommendations and provides AI-powered investment insights. Built with Go backend and Vue.js frontend.

Aug 2025 - RAG Product Recommender, Personal Project, Github Repository

Aug 2025 A production-ready RAG (Retrieval-Augmented Generation) system for product recommendations, demonstrating SOLID principles and clean architecture in ML systems. Build entirely using python: huggingface, numpy, pandas, torch, tansformers and streamlit

Jun 2024 – SmartCampus, Universidad de los Andes

Dec 2024 Degree final project: mobile application that, through authentication and role discriminations, enables the visualization of demographic distribution across campus. Built with Kotlin Multiplatform, Swift, Firebase, Android Studio, and Xcode. Focused on data processing, distributed systems, and real-time insights.

Jan 2024 – Predictive Lung Cancer Model, Universidad de los Andes & Hospital Santafé

Jun 2024 Team project to predict lung cancer probabilities using **machine learning models** trained on demographic, behavioral, and living condition data. Used Python, Scikit-learn, GCP Pipelines, and Google Colab. Built dashboards in Power BI to communicate insights.

Certificates

- 2025 **Building Transformer-Based Natural Language Processing Applications**, *Nvidia*, Certificate of Competency
- 2025 Fundamentals of Deep Learning, Nvidia, Certificate of Competency
- 2025 **Building LLM Applications With Prompt Engineering**, Nvidia, Certificate of Competency
- 2025 Learn Go Course, Codecademy, Certificate of Completion
- 2025 Learn Go: Loops, Arrays, Maps, and Structs, Codecademy, Certificate of Completion
- 2025 Learn Intermediate Go Course, Codecademy, Certificate of Completion
- 2024 Generative AI with Diffusion Models, Nvidia, Certificate of Competency

Skills

Data & Cloud

AWS (Lambdas, Glue), GCP (Pipelines, BigQuery), PostgreSQL, MongoDB, Relational and NoSQL Databases.

Machine Learning & Analytics

Python (Scikit-learn, Pandas), Predictive Modeling, ML Pipelines, LLM integration, Power BI, Data Processing and Visualization.

Software Development

React, Django, Node.js, TypeScript, JavaScript, Go, Java (11 & 17), Kotlin Multiplatform, Swift, CSS, HTML, CSS, Flutter.

Soft Skills

- Ownership & Responsibility: End-to-end project delivery and accountability.
- o Collaboration: Experience in cross-functional teams in startups, banks, and research.
- o Continuous Learning: Strong interest in AI/ML research and applied engineering.
- **Problem-Solving**: Applying critical thinking to business and healthcare challenges.

Languages

Spanish Native

English C1 Proficiency