Juan Almanza-Gamarra

Freshman undergraduate student solving the most pressing problems around the world using computational methods.

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SUMMARY

Freshman **Computational Sciences** and **Natural Sciences** student at **Minerva University** with a passion for using technology to **solve big problems**, with a deep knowledge of **software engineering** and **research methods** and their applications in the real world.

EDUCATION

Minerva University   **August 2025 - May 2029**
B.Sc. Computational Sciences and Natural Sciences   San Francisco, CA
Rigorous undergraduate education with **global rotation** (San Francisco, Tokyo, Buenos Aires, and Berlin), Coursework: **Formal Analysis**, **Empirical Analysis**, **Multimodal Communications**, and **Complex Systems**.

EXPERIENCE

Pulpoo, Inc.   **November 2023 - Present**
Technical Founder   Aventura, FL
- **Architected and developed** the core services powering Pulpoo's Mobile, Web applications, and APIs.
- **Recruited and led** a team of engineers to build a scalable integrated software platform serving **tens of businesses** with **thousands of employees**.
- Built **AI workflows** and developed static systems for granularly **monitoring and improving employee productivity**.

Women's Association for Rural Development (ASOFI)   **April 2022 - Present**
Founder & Technical Leader   Bogotá, Colombia
- Led a non-profit organization to develop **scalable solutions** for the rural Colombian population, with a seat on the **UN Women's Generation Equality Leadership Group**.
- Developed novel **AI models** for detecting diseases in cacao crops on offline low-end mobile devices, and offline **LLM** use through phone lines.
- Organized educational bootcamps on **Programming** and **AI development** for rural students in collaboration with **Universidad de los Andes**.

Stanford University   **June 2023 - August 2024**
Research Intern   Stanford, CA
- Developed novel mechanisms for **Source Separation** on Signals and **Drug Discovery** for cancer development.
- Applied **Fourier Transforms**, **Neural Networks** and **Data Analysis** to produce state-of-the-art results in both projects.
- Mentored students in coding and research skills, and organized talks with Stanford faculty, including **Nobel Prize winners**.

HONORS & AWARDS

- **Bronze medal**, International Olympiad in Artificial Intelligence IOAI (2024).
- **Colombian Representative**, International Olympiad in Informatics IOI (2023).
- **Gold medal (1st place)**, National Olympiad in Informatics NOI (2021, 2022, 2023).
- **Rise Fellow**, Rhodes Trust and Schmidt Futures full-ride scholarship (2024).

SKILLS

- Building **scalable end-to-end applications** in **JavaScript** and **Python**.
- Architecting **high-performance systems** and **algorithms** in **C/C++** and **TypeScript**.
- Conducting **high-impact research** on computational methods and applications.