Gabriel Isaac Alonso Serrato

(915) 777-2744 | gialonsoser@miners.utep.edu | linkedin.com/in/gialonsoser | https://arthifact.com

EDUCATION

Bachelor of Science in Computer Science, Concentration in Data Analytics — Expected: Dec/2025
The University of Texas at El Paso (UTEP) — GPA: 3.93/4.00

Honors & Affiliations
MIT SGI Fellow (2025) | President, ARTECS (2025) | Hackathon Winner – Google, Smart Borderland, BorderHack (2024–2025) | Houston Endowment Scholar (2023–2025) | UTEP Engineering Honors & Dean's List (2021–2025)

Relevant Courses
Applied Data Structures | Software Development Studio | Adv. Object-Oriented Programming | Computer Architecture | Database Systems | Operating Systems | Machine Learning | Data Mining | Computer Vision | Geometric Computing

SKILLS

- **Languages:** Proficient – Java, Python, GDScript | Intermediate – C, C#, JavaScript, PHP, Git/Bash | Basic – HTML/CSS
- **Engines & Tools:** Godot (Proficient), Unity (Intermediate), Google Cloud (Basic)
- **Frameworks & Libraries:** Flask, Matplotlib (Intermediate) | Pandas, scikit-learn, Astro (Basic)

EXPERIENCE

Undergraduate Research Assistant at CIELO-G lab — Oct/2024 - Present
University of Texas at El Paso — El Paso, Texas

- Designed and implemented a scalable Godot-based framework that streamlines the development of interactive Earth science mini-games, reducing production time by over 70%
- Translated scientific concepts into adaptive, game-based learning modules that adjust difficulty in real time based on student responses and engagement levels
- Engineered modular systems in GDScript and Python to enable real-time feedback, dynamic content loading, and performance-based progression, supporting integration for 10+ future educational experiences across 5+ schools in the El Paso community

Undergraduate Research Assistant with Dr. Jonathan Guerrero Sanchez — May/2023 - July/2023
National Center of Nanoscience and Nanotechnology — Baja California, Mexico
Autonomous University of Mexico

- Designed and implemented a Python program to generate 2000+ geometric configurations of molybdenum sulfide molecules, ensuring strict topological constraints
- Sent calculations to the Mexico City supercomputer to determine the energy states of new molecular configurations
- Conducted detailed data analysis to interpret the results, providing insights into the stability and properties of the molecular structures

Fellow at the Google Tech Exchange Program — Jan/2023 – May/2023
Google — Seattle, Washington

- Utilized Python, Flask, and GitLab CI/CD pipelines to maintain high code quality, and leveraged unit testing to ensure data accuracy
- Led a 3-person team to design and develop a full-stack wiki application utilizing Python, Flask, HTML/CSS, JavaScript, and Google Cloud Buckets
- Employed unit testing, Git version control, and Continuous Integration/Continuous Development pipelines to ensure code quality of the project

PROJECTS

Founder & President at Art & Computer Science (ARTECS) [Student Org.] — Oct/2024 - Present

- Founded ARTECS to bridge art and technology, growing the organization to 20+ members
- Led the development of a modular 2D exploration game built around interconnected portals, where each member designs their own level to contribute to a shared interactive world
- Coordinated 15+ workshops and events in collaboration with ARTECS officers, partnering with organizations like Xbox and local/national groups to deliver engaging sessions on creative coding, digital art, and tech-focused career development