Jesse Guerrero

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SKILLS

Programming Languages	Python	Java	JavaScript	C++	Typescript	Kotlin
Technologies	SQL	NoSQL	AWS Cloud	Digital Twins	OpenGL	Agentic	Multi-Modal LLMs	Vision
	Full-Stack	CUDA	High-Performance Compute	Hugging Face	Neural Networks

EXPERIENCE

Secure AI Autonomy Lab   May 2024 - Present

PhD Student   *University of Texas - San Antonio*

- Develop lab products and research publications here: https://secureaiautonomylab.github.io/
- Write heat island services and publish for digital twin product of San Antonio.
- Meet with utility companies and City of San Antonio for feedback and flexible development

Darkan   Jan 2020 - Present

Engine Developer   *Remote*

- Contributed heavily to 5 separate code bases for a free multiplayer open source Runescape remake
- Authored API and Linux backend in Javascript Node Express
- Implementations done for a Typescript API, Javascript website, Java game server, Java Client and Python tools
- Created many tools for scrapping data from original game in Python

Research Assistant   May 2022 - May 2023

M.Sc Student   *Texas A&M - San Antonio*

- Published 7 research papers based on deep learning and computer networks
- Assisted several PhD researchers with their research by scrapping, gathering and cleaning data sets
- Recieved grant and funding for research work.

Student Tech Support   June 2012 - August 2012

Summer Contract / Full-Time   *College Station, TX*

- Reported to supervisor and fulfilled technical support tickets.
- Assisted in hardware and software setup in a nearby library and public health department

Student Biology Internship   May 2009 - August 2009

Lab Assistant / Full-Time   *Brooks City Base, TX*

- Worked in a team of 4 to analyze papers for potential research opportunities
- Retrieved lab materials for daily experiments
- Ensured experiment result accuracy and logged data in Excel

NOTABLE PROJECTS

Digital Twin - San Antonio   Jan 2024-Present

PhD Student   *San Antonio, TX*

- Working with CPS Energy, San Antonio Water Systems and City of San Antonio to create a digital twin for Urban planning.
- Using Omniverse to create digital twin services given funding from company and city.
- Publish papers based on digital twin research.

Darkan Products   Jan 2023 - Present

Developer   *Remote*

- Used Express to design large website (>45 pages) matching reference implementation
- Sped up API-heavy site pages by implementing server-side rendering for the blog, highscores, XP Tracker and 5 other pages using Typescript + Handlebars
- Developed scalable backend API using Typescript and MongoDB

EDUCATION

Masters of Science - Computer Science (Summa Cum Laude, GPA 4.00)

Texas A&M - San Antonio

Bachelor of Business - Information Systems (Magna Cum Laude, GPA 3.72)

Texas A&M - San Antonio