Robert Rodriguez

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(925)-858-8222 | Livermore, Ca

I am an Aerospace Engineer passionate about data analysis, 3D modeling and software development, driven by a fascination with mathematical concepts and mechanical systems.

EDUCATION

Arizona State University, SEMTE   Graduated: December 2021
Bachelor's Degree in Aerospace Engineering

EXPERIENCE

TOPCON Positioning Systems | Test Automation Engineer   January 2022 - Current
- Used dual-band GNSS technology to identify ionospheric delays, leading to the development of a comprehensive heatmap depicting ionospheric disturbances.
- Conducted rigorous testing of positioning and auto-driving tractor systems, documenting procedures and outcomes on Jira with precision and clarity for future reference.
- Enhanced internal GNSS receiver testing software, utilizing PyQT and Git for feature upgrades and maintenance, improving efficiency and capabilities.
- Managed a team of data engineering interns, focusing on troubleshooting and problem-solving in both hardware and software domains.

Crystal Communications | 3D Modeling Contractor   June 2021 – July 2021
- Crafted intricate replacement parts for handheld radios and other devices using Solidworks, demonstrating precision and attention to detail in design.
- Utilized the Solidworks assembly feature to construct and visualize complex assemblies, presenting sophisticated models to clients that showcased functionality and aesthetic appeal.

Space Tourism Aircraft Project | Mission Operations Lead   August 2021 - December 2021
- Led the mission operations team on an exciting project to develop an aircraft designed for space tourism, capable of reaching over 100km high using both jet and rocket power.
- Conducted practical trade studies to figure out the best flying conditions, such as how high and fast the aircraft should cruise and the best way to re-enter the atmosphere safely.
- Used tools like MATLAB, Excel, and Python for data analysis, and worked with an aircraft stability modeler and a simulator in Visual Basic to get important data for our project.

TECHNICAL SKILLS

Programming:	VBA, SQL (1yr)	HTML/CSS/JavaScript (2yrs)	Python (3yrs)	MATLAB (4yrs)
CAD:	Solidworks (FEA), AutoCAD, Ansys (Fluent) (2yrs)	Solidworks (5+yrs)
Operating Systems:	Linux, Raspberry Pi (2yrs)	Windows (5+yrs)
Microsoft Office:	PowerPoint, Teams (3yrs)	Word, Excel (5+yrs)
Fabrication:	Hand/Power Tools, Prototyping, Designing (5+yrs)

References Available Upon Request