mariosultan98@gmail.com linkedin.com/in/mario-sultan/ MarioSultan.com

Experience

Ideation/Design Engineer — Mario Sultan Designs

- Provided 3D Modeling, 3D printing and design services to over twenty individual creators and business owners
- Built four website platforms centering engineering best practice, design thinking and 3D printing services
- Developing an engineering enterprise which courageously creates alongside and will eventually inspire and hire young, minority creatives
- Consults with the Kijana Global Innovation School in Buchenya, Kenya in 3D Printing practice

STEM Educator — Cristo Rey Richmond High School (CRRHS)

- Developed and implemented comprehensive 11th-grade Physics, Engineering and Algebra 2 curricula
- Instituted the first-ever Engineering elective and makerspace for CRRHS aligned with engineering business structure
- Integrated industry-relevant projects and engineering methodologies into my instructional process, with SOPs
- Provided instruction to students in the areas of design, Computer-Aided Design (CAD), 3D printing and various design-related processes
- Authored grant proposals with Deloitte, resulting in \$85,000 in funding over two years for the STEM program

Corporate Work Study Program Assistant – Cristo Rey Richmond High School Sept 2021 - Aug 2022

- Managed Salesforce operations for over sixty Corporate Sponsors, including data reporting, analysis and optimizing key processes through scripting within spreadsheets
- Served among the Bon Secours Volunteer Ministry, rooted in the ideals of compassion, healing and liberation
- Cultivated individual relationships and partnerships with students and Corporate sponsors by planning classes and events, spear-heading online email communications and conducting site visits

Systems Engineer I – Leonardo DRS Electro-Optical Imaging Systems (EOIS) Sept 2019 - Feb 2021

- Supported the Family of Weapon Sights–Crew Served (FWS-CS) government-contract.
- Worked closely with program leadership and other engineers to coordinate the software release process, which included drafting software verification documents, conducting software tests, documenting issues and assisting with root cause determination.
- Developed systems to increase the efficiency of troubleshooting and testing processes with Excel VBA and MATLAB scripts.

Education

Florida Tech, B.S. Mechanical Engineering, Melbourne, FL (3.76 GPA)

- Team Lead, Senior Design Capstone Project (2019-2020)
- Research Assistant, Lockheed Martin (2019)
- Team Lead, Freshman Design Project (2016)

Skills

- Expert working proficiency in Microsoft and Google Suite applications (Excel/Sheets, Word/Docs, PowerPoint/Slides)
- Expert in using and troubleshooting FDM 3D Printing/Rapid Prototyping on various 3D printing machines and with different plastics
- Expert in designing parts and assemblies within Creo Parametric CAD with some experience with FreeCAD
- Basic working proficiency in Ansys Workbench for Finite Element Failure Analysis (FEA) and some theoretical experience in Failure Mode and Effects Analysis (FMEA)
- Strong experience with Arduino/Microcontrollers and over 50 related electronics/digital and analog sensors
- Strong mechanical/construction skills with a basic working proficiency in fabrication/machining (lathe, mill, CNC)
- Organization, redlining, rewriting requirement specifications in alignment with best-practices in IBM DOORS
- Wordpress Website design and development including working with javascript, HTML and CSS
- User Interface and User Experience (UI/UX) development within SaaS creation
- Basic working proficiency of C++, python, VBA, other script automation tools and MATLAB
- Al and prompt engineering application experience (OpenAl APIs, LLM application within education, SaaS, design)

Aug 2022 - June 2024

August 2016 - May 2020

Aug 2022 - Present