

ISAAC GHOBRIAL

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SKILLS

EXCELLENT IN:

- Certified Solidworks Professional in Mechanical Design
- Fusion 360
- Additive Manufacturing
- -Microsoft Suites

PROFICIENT IN:

- -Design for Manufacturing(DFM)
- -IQMS/ DELMIAworks
- -Minitab
- -MATLAB
- -Arduino/ C Programming
- -CNC Milling
- -Laser Cutting

PROJECTS

BIOMEDICAL ENGINEERING SOCIETY ROBOT HAND

- Developed and assembled a fully 3D printed robotic human hand with individually controllable fingers powered by 5 servos

FIU 3D PRINTED FACE SHIELDS

- Increased 3D print efficiencies by 50% by maximizing the print quantities and optimizing slicer parameters to use simplest tool path

EDUCATION

FLORIDA INTERNATIONAL UNIVERSITY HONORS COLLEGE
Bachelor of Science Degree in Biomedical Engineering
May 2020

EXPERIENCE

KV ENGINEERING INC | Independent Contractor

October 2023

- Researched, identified, and installed a new control board for a Mingda MD-1000 Pro 3D printer
- Updated dupont wire connectors to be compatible with the new board's ports customized and installed appropriate firmware to fully operate the 3D printer
- Developed and ran tests ensuring all components are fully functional

BIOREP TECHNOLOGIES | Manufacturing Engineer

April 2021 - August 2023

- Sole manufacturing engineer in charge of managing production deficiencies for six minimally invasive cardiovascular surgical devices and diabetes research equipment
- Create, execute, and oversee all manufacturing validations (IQ/OQ/PQ) for processes such as ultrasonic cleaning, packaging, and assembly on equipment such as pneumatic tools, ultrasonic cleaning tools, Keyence Laser engraving tools
- Conduct 25% of nonconforming material investigations utilizing 5 Whys and Fishbone Diagrams on Class I and II regulated medical devices and implement solutions as needed such as new or updated procedures, inspection programs, or equipment
- Design, test, and implement CAD modeled manufacturing jigs through the change order process and assess affected risk

DEPARTMENT OF DEFENSE CCDC | General Engineer

September 2020 - March 2021

- Audited design drawing databases against current standards and ensured the online CAD library was up to date
- Provided to support operations on installations and repairs of gas masks worldwide

CORDIS CORPORATION | Intern

May 2019 - July 2020

- Wrote and executed over 20 protocols, including installation qualifications, for incoming devices and instruments
- Conducted testing to determine material properties of PTFE tubing with an Instron and a Biolin Scientific Optical Tensiometer and executed report of findings

FIU HONORS COLLEGE EDGE LAB | Lab Manager

August 2017 - May 2020

- Led the development and cultivation of a lab that initiated engagement with the maker community
- Mentored 12 students weekly in project development for CAD 3D-Design software such as Solidworks and troubleshooted manufacturing design flaws
- Provided technical and creative, design assistance to students for personal and academic projects using tools like SLA/ FDM additive manufacturing and CNC Milling
- Recruited and managed 20+ lab volunteers, organized events, coordinated sales, & assessed lab project priorities.

AIOLOS GROUP INC. MACHINE SHOP | Independent Contractor

March 2018 - August 2018

- Performed quality control of over 100 surgical tools per day using a Mitutoyo Optical Comparator to ensure tolerance measurements were within a hundredth of an inch for each tool
- Increased production of CNC machined parts by 15% through programming and operation of Quasars and Robodrills utilizing G-Code software