Guy Bitton Chicago area or remote | guybitton91@gmail.com | 773 543 9690 | www.linkedin.com/in/GuyBitton | guybitton.github.io

A hands-on robotics engineer with 1 year of robotics manufacturing experience, over 2 years of experience in R&D of a mechatronic device and 5 years of experience in RF systems, leadership, and operation as an officer in Israel's elite technology unit. Looking to make an impact in the development of both hardware and software for robotic systems. Take a look at my projects here. Eligible to work in the US without sponsorship.

#### **PROFESSIONAL SKILLS**

- Development of a Robotic Device (Published)
- Python, C, C++, MATLAB.
- Hands-on Electronics and Microcontrollers
- Robotics Manufacturing

- Leadership and Communication (Military Officer)
- Rapid Prototyping and CAD (SolidWorks)
- Robot Kinematics & Dynamics
- Linux(Ubuntu) and ROS (currently learning).

#### PROFESSIONAL EXPERIENCE

## **Product Engineer (Surgical Robotics)**

Mar 2021 – Present

Plexus Corp.

- Subject matter expert for the functionality and manufacturing of the robotic arm constructing the most advanced Robotic-Assisted Surgery (RAS) system in the world.
- Evaluate and troubleshoot complex mechatronic assemblies on a daily basis.
- Increased yield of a subsystem by over 70% by finding root cause and implementing design changes.

### **Medical Robotics Researcher**

Jul 2018 – Dec 2020

The Bio-inspired and Medical Robotics Lab and the Biomedical Robotics Lab

- Designed a robotic (haptic) device that was published in an IEEE journal and will contribute to medical applications such as surgical robotics. Developed the device from concept to execution using CAD, 3D printing, microcontrollers (embedded C/C++), and sensors.
- Implemented a user interface and data acquisition system using MATLAB and conducted over 10 psychophysical user experiments in the lab. Performed data analysis that led to published conclusions.
- Invented a new measurement concept that reduced measurement errors from over 10% to only ~1%. Developed test plans and fixtures for the new method and reduced effects of manufacturing tolerance.

# System Integration Engineer/Team Lead (Lieutenant) | Unit 8200

Aug 2009 - Aug 2014

- Led a team of 5 to perform successful testing & validation of a \$10M RF system under a tight schedule.
- Led teams of 12 to accomplish ~50 missions in the operation of complex RF systems, making real-time technical and operational decisions. Was promoted due to excellent performance.
- Operated over 7 highly complex RF systems and solved malfunctions while having limited resources.

## **EDUCATION**

# MSc Mechanical Engineering | Ben-Gurion University (Be'er-Sheva, Israel)

2018 -2020

• GPA: 4.0; Accelerated MSc for top 10% of students; Full-ride scholarship.

# **BSc Mechanical Engineering** | Ben-Gurion University (Be'er-Sheva, Israel)

2015 - 2019

- GPA: 3.7; Top 8%; Best capstone project (2019) out of ~60 projects.
- Chairman award (2017) given to 1 out of ~160 students.

Other courses: Robot kinematics & dynamics, C++ bootcamp course, python bootcamp course.

Additional Skills: Linux (Ubuntu - basic), ROS (basic), ModeFrontier (Basic), Visual Studio, MS Office, GD&T.

Languages: English (fluent), Hebrew (fluent), French (conversational), Spanish (conversational).