Guy Bitton

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

A hands-on robotics software engineer with **5 years** of experience in various fields of robotics and **5 years** of experience in RF systems, system integration, leadership, and operations as an officer in Israel's elite technology unit. Looking to make real-world impact in the realm of robotics & autonomy. **See some of my projects here.**

PROFESSIONAL SKILLS

- **Robotics Software**
- **C++, C, Python, MATLAB.**
- **Development of a Haptic Device (IEEE Published)**
- **Hands-on Robotics and Prototyping**
- **Communication and Teamwork (Military Officer)**
- **Root Cause Analysis and Data Analysis**
- **Development on Linux**
- **Robot Operating System (WIP)**

PROFESSIONAL EXPERIENCE

Robotics Software Engineer — May 2022 – Present

John Deere – Intelligent Solutions Group – Automation & Autonomy

- Develop robotics software using C++ in a Linux environment and C in RTOS environment on Arm based SoCs for a system already deployed to over 400 machines.
- Led architecture of new features critical to the successful product launch in new global markets.
- Resolved major customer-facing defects in the inter-process communication of the application.
- Mentored 3 new graduates and helped them become successful contributors on the team.

Product Engineer (Surgical Robotics) — Mar 2021 – Apr 2022

Plexus Corp.

- Subject matter expert for the functionality and manufacturing of the robotic arm constructing one of the most advanced Robotic-Assisted Surgery (RAS) systems in the world.
- Increased yield by over 70% and resolved over ~50 major issues that helped triple production rate.

Robotics Researcher — Jul 2018 – Dec 2020

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

- Designed a 2-DoF robotic haptic device that was published in an IEEE journal and will contribute to medical robotics. Programmed the device's position and calibration control (embedded C, C++).
- Implemented a UI and data acquisition software in MATLAB. Conducted over 10 user experiments and performed data analysis that led to published conclusions.
- Invented a force measurement concept that reduced errors from over 10% to ~1%.

System Integration Specialist/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 ME with Thesis in Robotics | 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.

Additional Skills: Git & GitHub, Docker, Linux, Bash, Visual Studio, CANBus, MS Office
Languages: English (fluent), Hebrew (fluent), French (conversational), Spanish (conversational).
Other courses: Robot kinematics & dynamics, C++ , python, matlab, numerical methods.