

Ben Benyamin

+872-946-5232 — benbin52@gmail.com — LinkedIn — Github — Portfolio

TECHNICAL SKILLS

Programming Languages: Python , C++ , C

Tools & Technologies: PyTorch , Keras, pytest , OpenCV, ROS2, Git, Linux, Docker

Engineering Design & Production: SolidWorks , Milling, CNC, Sheet Metal, 3D Printing (FFF) , PCB Design

Languages: Hebrew (Native), English (Fluent), Mandarin Chinese (Proficient)

EDUCATION

Northwestern University

Dec 2025

Master of Science in Robotics

Tel-Aviv University

2020

Bachelor of Science in Mechanical Engineering

GPA: 93/100 , Dean's List

Emphasis on Control, Autonomous Systems and Mechatronics

NTNU Mandarin Training Center, Taiwan

2023

Mandarin Language studies

EXPERIENCE

Automata - Advanced Automation Solutions

2022-2024

Hod Hasharon, Israel

Mechanical Engineer

- Developed mechanical enclosures for electronics, including prototyping, design-to-cost, and production jigs.
- Developed simple PCBs used in Automata's products.
- Developed customized systems to meet client specifications and requirements.

Automatica – Automation and Control Technologies LTD

2020-2022

Kfar Saba, Israel

Mechanical Engineer

- Revamped two production lines for a medical chemotherapy product based on customer requirements, including end-to-end system design, mechanical design in SolidWorks, and pneumatic systems (pistons, grippers).
- Integrated electrical components (feeders, AC servo motors) for the production lines.
- Participated in design reviews, technical drawings, and part production for project implementation.

Israel Defense Force

2013-2016

Platoon Medic

PERSONAL PROJECTS

Point Cloud Object Detection with RGBD

Implemented PointNet with addition of RGBD data with PyTorch to classify objects using both RGB and 3D point cloud data. Addressed challenges like point cloud orderlessness and occlusion in real-world scenarios. Generated a dataset with Isaac Sim, achieving 70% test accuracy on over 16,000 samples.

Whack-a-Mole Playing Robot

Using the Intel RealSense camera(RGBD), and AprilTags, the Franka Emika robotic arm was programmed to play Whack-a-Mole entirely wholly in the ROS2 ecosystem. OpenCV was used to coordinate the robot's actions and track the locations of the moles.

Arm Assistive Exoskeleton

Commended by the Faculty of Engineering Evaluation Committee for outstanding performance at the 2020 Mechanical Engineering Graduation Project Exhibition.

Design and manufacture of an arm assistive exoskeleton. Mechanically designed in SolidWorks, prototype created using CNC machining, sheet metal and 3D printing, structural analysis using FEA in SolidWorks.

Interests: Electric guitar , Hiking , Biking ,Video Games