




Ben Benyamin

☎ 872-946-5232 — ✉ benbin52@gmail.com —  LinkedIn —  Github —  Portfolio
[linkedin.com/in/ben-benyamin](https://www.linkedin.com/in/ben-benyamin) github.com/BenBenyamin BenBenyamin.github.io

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)

Interests: Electric guitar , Hiking , Biking , Video Games

EDUCATION

Northwestern University – *Master of Science in Robotics*

Dec 2025

Tel Aviv University – *Bachelor of Science in Mechanical Engineering*

2020

GPA: 93/100 , Dean's List

NTNU Mandarin Training Center, Taiwan – *Mandarin Language studies*

2023

PERSONAL PROJECTS

Point Cloud Object Detection with RGBD

- Implemented PointNet with RGBD data using PyTorch for object classification, leveraging both RGB and 3D point cloud data.
- Addressed challenges such as point cloud orderlessness and occlusion in real-world scenarios.
- Generated a dataset using Isaac Sim, achieving 70% test accuracy on over 16,000 samples.

LiDAR Equipped Drone for SLAM

- Deployed a PIXHAWK PX4-equipped drone for SLAM-based mapping using a 2D LiDAR.
- Integrated the drone within the ROS2 ecosystem, controlled by a laptop running mapping packages.

Arm Assistive Exoskeleton

Recognized by the Faculty of Engineering for exceptional performance at the 2020 Graduation Project Exhibition.

- Designed and manufactured an arm assistive exoskeleton for people with muscle weakness from peripheral nerve conditions.
- Created mechanical designs in SolidWorks and prototyped using CNC machining, sheet metal, and 3D printing.

EXPERIENCE

Automata - Advanced Automation Solutions– *Hod Hasharon, Israel*
Mechanical Engineer

2022-2024

- Developed mechanical enclosures for electronics, including prototyping, design-to-cost, and production jigs.
- Designed and developed streamlined PCBs for Automata's products.
- Built tailored systems to align with client specifications and requirements.

Automatica – Automation and Control Technologies LTD– *Kfar Saba, Israel*
Mechanical Engineer

2020-2022

- 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
Platoon Medic

2013-2016