CONTACT

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in LinkedIn

📞 052-8915-892

SKILLS

Scientific Research

Solid State Physics

Python

Scientific Computation

Statistical Analysis

COMSOL

C++ (Arduino)

LAB EXPERIENCE

- Digital Holography
- Rb Saturation Spectroscopy
- NMR spectroscopy

REFERENCES

✉ Prof. Yonatan Sivan [*]

✉ Dr. Yevgeny Bar Lev [**]

LANGUAGES

- **Hebrew** - fluent
- **English** - fluent

BEN SHPIGEL

BSc Physics MSc Electro-Optics

A soon-to-graduate scientist with a robust foundation in multiple scientific disciplines and a commitment to continuous learning. I look for challenging opportunities in dynamic environments where I can use my skills to solve problems, collaborate effectively, and drive meaningful results.

EDUCATION

MSc Electro-Optics   2023 - 2025

Ben Gurion University of the Negev

Research

- Conducted an analytical study on out-of-equilibrium electronic transitions contributing to photoluminescence in metals, utilizing numerical methods and algorithms to model and quantify the effects.[*]
- Leveraged the photo-thermal response of ITO to develop a novel experimental setup for water desalination, collaborating with experimentalists and utilizing computational simulations to validate the approach.[*]

BSc Physics   2018 - 2022

Ben Gurion University of the Negev

Final Project

- Performed a quantum many-body simulation of the BCS hamiltonian. Managed to demonstrate strong (Anderson) electron localization for disordered potentials.[**]

PROFESSIONAL EXPERIENCE

Physics R&D   2022 - 2023

K-Optics

Collaborated with mechanical engineers to develop cost-effective educational optical kits. Planned experiments ranging from geometrical optics to interferometry and authored comprehensive experiment manuals.

Research Assistant   2019 - 2020

Atom-Chip Group, Ben Gurion University

Contributed to the construction and measurement of magneto-optical traps, participated in setup of high-vacuum systems, and ensured optimal functionality of lab equipment.