Ilay Wischnevsky Shlush

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EDUCATION

Tel Aviv University Tel Aviv

Bsc. Student (Physics and Engineering Degree)

Jan 2024

Relevant Coursework: Real Analysis 1 (98), Classical Physics 1 (100), Mathematical Intro. for Physicists (100), Linear Algebra 1 (96).

HEMDA Schwartz-Reisman Science Education Center

Tel Aviv

Jun 2023 | FINAL: 100/100

Physics Major, Excellence Class

Selected for an Advanced Excellence Program

Relevant Coursework: Special Relativity, Intro. to General Relativity, Intro. to Quantum Mechanics.

Computational Science Major Jun 2023 | FINAL: 100/100 Relevant Coursework: Python (Matplotlib, Numpy), Differential Equations, Machine Learning

Tel Aviv

Herzliya Hebrew Gymnasium High School Mechatronics Major.

Jun 2023 | FINAL: 100/100 Relevant Coursework: Arduino Programming, Electrical Circuits, Algorithm Development, Project Management

Other: SAT 1490

WORK EXPERIENCE

Tel Aviv Waves Audio (Waves)

Research Assistant, Software Developer (Intern)

Jun 2021 - Dec 2021

- Conducted measurements on earphones to test acoustic properties (temperature's effect on resonance)
- Analyzed Data
- Developed python code automizing the measurement system

ACTIVITIES

Talat - "Students for Students"

Co-founder, Teacher

- Helped found an afterschool program where students volunteer as community work
- Taught and mentored students in physics and math

PROJECTS

8080

Engineered and programmed an automatic acoustic drumset using Arduino

Light Curve Inversion

- Programmed a neural network aiming to reconstruct 3D asteroid shapes only from their light curves
- Created a raytracer to generate lightcurves from asteroid data

Wave Motion in a Non-Uniform Medium

Simulated waves as they propagate through different non-uniform mediums

Spontaneous Synchronization of Fireflies

Built a model to study the factors affecting the synchronization of fireflies

Exploit (Game)

- Created a game in Godot as a part of the Godot Wild Jam
- Won 3rd place in an international coding hackathon