

# Gabriel Ganeles

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## EDUCATION

**Technion Institute of Technology** / HAIFA, IL 2021 - Present

- Candidate for Bachelor's of Science in Biomedical Engineering, GPA: 83.3

**Hevruta, Shalom Hartman Institute** / JERUSALEM, IL 2019 - 2020

- Participated in leadership training, text-based Jewish learning, political engagement and cultural exploration seminars, weekly volunteering, and part-time internship during international gap-year program

**Hebrew High School of New England (New England Jewish Academy)** / WEST HARTFORD, CT 2015 - 2019

## INDEPENDENT PROJECTS

**SET and Other Games** / Free Multiplayer Real-Time Board Game Website / setgame-4508c.web.app 2023

- Four online multiplayer games programmed in Svelte: Set, Anagrams (sometimes called Snatch), memory game, and Skull
- Utilized Firebase Hosting for free hosting, and Firebase Realtime Database to enable server-less synchronous real-time gameplay

**Shab-BOT** / Shabbat Meal-Planning Whatsapp Assistant / +1 (203) 802-5238 2022

- Community meal organization Whatsapp bot coded in Node.js using whatsapp-web.js, hosted on a raspberry pi
- Functionality includes: create events to track guests and food brought, determine additional event needs with dish type parsed by GPT, locale dependent Shabbat candle-lighting time, reminders and scheduled messages

## EXPERIENCE

**Formula Technion** / Electronics Team Member / HAIFA, IL 2023 - Present

- Designed printed circuit boards in Altium Designer to implement sensor circuits that multiplex between seven different data lines attached to different encoders in a formula car
- Developed a CAN bus module in C with an Arduino to read, process, and send sensor data to the autonomous control unit when pinged with a CAN message

**Kajomovitz CERN Technion Lab** / Student Engineering Intern / HAIFA, IL 2023 - Present

- Determined active detector regions when simulated muons pass through the New Small Wheel using Python
- Wrote an algorithm to determine the optimal set of valid Thin Gap Chamber Pad Trigger detector patterns

**Flinker Lab at NYU Langone** / Non-Traditional Volunteer / NEW YORK CITY, NY Summer 2023

- Interpreted and processed 50 patients picture naming stereoelectroencephalography (sEEG) data using MATLAB, preparing it to train sEEG-to-speech convolutional (ResNet) and transformer (SWIN) neural network models
- Combined MRI and CT data into 3d surfaces of brains, using it to categorize depth electrode placement (git: ntools\_elec)

**Technion Rocketry Club** / Aerodynamics Team Member / HAIFA, IL 2022 - 2023

- Developed a parachute launcher utilizing CAD techniques to ensure consistent and reliable deployment
- Collaborated with 27 team members to identify project requirements and specifications, resulting in timely completion of project milestones

**Technion Automated Robotics Initiative** / Student Engineering Intern / HAIFA, IL 2021 - 2023

- Manufactured a 3D printed robotic gripper specializing in picking up a piece of salmon without the use of soft robotic parts, as they are expensive to maintain on a food grade level
- Developed and implemented code using C to control arduino motor and driver circuit

**Mission Escape Games** / Puzzle Master / WEST HARTFORD CT 2020 - 2021

- Managed and coordinated escape room bookings in a professional and courteous manner
- Guided and supervised customers in completing escape rooms, providing assistance to enhance user experience

**Aurbach Lab at Bar Ilan** / Researcher / RAMAT GAN IL 2019 - 2020

- Wrote and implemented a data presentation program using Visual Basic to streamline data analysis for battery testing

# Gabriel Ganeles

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## LEADERSHIP & VOLUNTEERING

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**Gazelle Valley** / Park Volunteer / JERUSALEM, IL

September 2019 - March 2020

- Volunteered 3+ hours weekly to care for the park, planting trees, cleaning litter, and clearing reeds from the swamp
- Designed and constructed a cage for baby turtles to protect them from predatory birds

**NEJA STEAM Program** / Student Mentor / WEST HARTFORD, CT

2018 - 2019

- Instructed local middle school students in science, technology, engineering, arts, and mathematics weekly for 2+ hours
- Mentored students in science experiments - dyeing fabrics and materials, building anemometers, creating microbiomes

**Camp Shalom** / Counselor / WINDSOR, CT

2019

- Led 17 boys aged 10-12 at summer camp, providing guidance and support for their social development and well-being

## AWARDS

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**National Merit Scholarship Program Commended Student**

2019

**Rensselaer Polytechnic Institute Rensselaer Medal Award**

2018

- Outstanding academic achievement in the study of mathematics and science

**Society of Women Engineers Certificate of Merit**

2018

- In recognition of three years of excellence in science and mathematics

## SKILLS

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Interests: Piano, Guitar, and Ukulele

Computer Programs: Adobe Illustrator, Photoshop, and Premiere Pro; Creo, Onshape, SOLIDWORKS, LTSpice, Altium

Coding Languages: Python, Javascript, HTML, CSS, C, C++, Svetle, React, React-Native

Languages: English, Hebrew