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: 84.5

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 / Structure Team Member / HAIFA, IL   2022 - 2023
• Developed a spring-based 3d printed parachute launcher and mount for a hybrid solid-gas model rocket
• Collaborated with 8 other team members, as well as members of propulsion and avionics teams to design a rocket body

Technion Automated Robotics Initiative / Student Engineering Intern / HAIFA, IL   2021 - 2023
• Manufactured a 3d printed robotic gripper specializing in reliably picking up and placing salmon filets in salmon packing factories.
• Implemented a C-based script on an Arduino Nano to control motor and driver circuits for manipulation of the gripper

Mission Escape Games / Puzzle Master / WEST HARTFORD CT   2020 - 2021
• Managed and coordinated escape room bookings, including answering phone calls, ensuring timely participation, and organizing payments
• Guided and supervised customers in completing escape rooms, providing assistance to enhance user experience

Aurbach Lab at Bar Ilan / Research Intern / RAMAT GAN IL   2019 - 2020
• Wrote and implemented a data presentation program using Visual Basic to streamline data analysis for battery testing

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LEADERSHIP & VOLUNTEERING

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

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

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