

# Rami Habib

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## EDUCATION

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### Technion - Israel Institute of Technology

Bachelor of Science in Computer Science

Expected Graduation, June 2026

- o GPA: 82/100
- o **Related Coursework:** Operating Systems ,Data Structures , Algorithms1, Computer Organization & Programming, Combinatorics, Digital Systems & Computer Structure, Probability ,Introduction to Systems Programming .

## EXPERIENCE

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### Franchise Manager - Cofix

Sakhnin, Israel

March 2021 - March 2022

- Successfully managed and reopened a family-owned coffee shop franchise post-COVID-19 pandemic at the age of 17.
- Implemented new business strategies and marketing initiatives to restore revenue levels to pre-pandemic figures within one year.
- Oversaw daily operations, staff management, inventory control, and customer service to ensure a smooth and efficient business operation.
- Developed and maintained relationships with suppliers and customers to enhance business growth and customer satisfaction.

### Systems Programming Tutor - Technion (Equal Opportunities Projects)

Haifa, Israel

November 2023 – June 2024

- Tutored the Systems Programming course in Arabic for Arab students at Technion.
- Provided one-on-one and group tutoring sessions, helping students improve their understanding and performance in the course.
- Collaborated with other tutors and staff to enhance the overall educational experience for students .

## PROJECTS

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### Multithreaded Web Server

- Developed a web server capable of efficiently handling HTTP requests using multithreading.
- Implemented scheduling algorithms to optimize request handling and server performance.
- Benchmarked server performance, handling up to 1,000 concurrent connections with minimal latency.
- **Technologies Used:** C, POSIX Threads, Socket Programming, UNIX System Calls

### Dynamic Memory Allocator

- Built a dynamic memory allocator implementing custom routines (malloc, calloc, realloc, and free).
- Utilized a buddy system for efficient memory allocation and deallocation.
- Achieved a performance improvement of 25% compared to standard allocators in specific workloads.
- **Technologies Used:** C, Memory Management, POSIX System Calls (sbrk, mmap), Data Structures

### Custom Shell with Signal Handling

- Developed a Unix-like shell in C++ with features such as job control, signal handling, and command execution.
- Enhanced the shell with functionality for foreground and background jobs and process management.
- Integrated advanced debugging features and scripting capabilities, expanding usability for developers.
- **Technologies Used:** C++, POSIX System Calls, UNIX Signals, Process Control

### Olympics Management System

- Designed a system to manage events, athletes, and scheduling for a simulated Olympics.
- Implemented database-like functionality with efficient querying and reporting features.
- **Technologies Used:** C++, Object-Oriented Design, File I/O.

## **SKILLS**

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**Programming Languages:** C++, C, Python, Assembly.

**Technical Skills:** Multithreading, Memory Management, Data Structures, UNIX Systems Programming, Object-Oriented Programming, Digital System Design, Probability and Statistics, Algorithm Analysis

**Soft Skills:** Leadership, Problem-Solving, Team Collaboration, Communication, Adaptability.

**Languages:** Fluent in English, Hebrew, and Arabic.