Tomer Ben Ami

Embedded Systems & Software Developer

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PROFESSIONAL SUMMARY

Embedded Systems Engineer with experience in C/C++, real-time systems, and STM32 development. Skilled in low-level programming, debugging, Linux Environment. Also experienced in full-stack development with .NET and Angular, with a strong foundation in software engineering principles.

TECHNICAL SKILLS

Embedded Systems: Bare-metal development, FreeRTOS, interrupt handling, UART, I2C, SPI, PWM, ADC/DAC, watchdogs, and timers
Languages & Tools: C, C++17, Linux Environment, Function Pointers, Smart Pointers, RAII, STL Containers, Templates, Bitwise operations
OS & RTOS Concepts: Process/thread management, scheduling, memory management, file systems, kernel modules
Data Structures & Algorithms: Linked lists, trees, heaps, hash tables, cyclic buffers, sorting/searching algorithms
Multithreading: Mutexes, condition variables, semaphores, thread pools, race condition handling
Networking: TCP/UDP socket programming, IP addressing, DNS, NAT, OSI model
Design & Architecture: OOP, SOLID principles, design patterns, optimization strategies

WORK EXPERIENCE

Embedded & Software Development Course - Oct 2025 – Present
- Intensive hands-on training in Embedded C/C++, real-time systems, microcontrollers, and software fundamentals
- Covered FreeRTOS, STM32, multithreading, low-level drivers, data structures, and system architecture

Full-Stack Developer, Optimove – Jan 2024 to Oct 2025
- Developed internal tools with .NET (C#) and Angular
- Implemented APIs, debugged systems, improved front and back end
- Managed SQL Server databases and system logic

Operations Engineer, Optimove – Apr 2022 to Jan 2024
- Solved system issues and integrated data with SQL Server
- Worked with internal teams and supported clients

EDUCATION

B.Sc., Electrical Engineering – Afeka College of Engineering, Tel Aviv
Specialized in Computers & Communication
IDF Servings: Military Service, Israeli Naval Forces (2013–2016)