

Adir Barak

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Dedicated and highly motivated computer science student seeking a student position or an internship to apply and expand my knowledge and programming skills, collaborate on fascinating innovative projects, and contribute to a mission-driven organization.

Education

Bachelor of Science in Computer Science at **The Hebrew University of Jerusalem**.

Current GPA: 86.82. Expected Graduation: Oct, 2025.

Relevant Coursework: Introduction to Computer Science (Python), Programming Workshop in C & C++, Data Structures, Linear Algebra (1 & 2).

Projects

Moshal Social [React | MongoDB | Node.js | Express.js | Firebase Storage]

- Designed a dynamic and interactive web platform that allows the Moshal Program scholarship recipients, alumni, and staff to mingle, interact and help each other.
- Developed a user-friendly interface using React (with JavaScript, HTML & CSS) and a reliable backend with Express, Mongoose, and Firebase Storage service.
- Implemented secure user authentication with JWT, data caching for improved performance and searching capabilities for a convenient user experience.
- Turned Moshal Social into an open-source project, aiming to offer both current students and alumni the opportunity to gain practical experience, experiment with web development technologies, and to give back to the Moshal Program's community.

Medical Innovation Hackathon [Next.js | Material-UI (MUI)]

- Created a prototype for an A.I assistant that streamlines the generation of discharge letters from the Emergency Room, with the primary objectives of significantly accelerating the process, improving readability for patients, and minimizing the potential for errors by the staff.
- Customized a Next.js template to align with the prototype's requirements by making visual modifications and additions using MUI, and integrating logic and mock functionality with React to showcase the concept in action.
- Led a diverse team consisting of both technology and medical students to develop an innovative solution for healthcare challenges.

Boggle [Python | Tkinter | Pytest]

- Built a variation of the board game 'Boggle', focusing on implementing OOP paradigms with Python and Tkinter.
- Deployed automated and manual unit-testing to ensure reliability, following a Test Driver Development (TDD) approach.
- Crafted custom data structures and algorithms to maximize efficiency, working on a 300K words dataset, resulting in a highly responsive and smooth player experience.
- Enhanced player experience even further with sound effects, visual cues, and a special "Party" game mode.

Skills

Programming: Python, C & C++ through university coursework and self-taught web development skills, including HTML, CSS, Tailwind, JavaScript, React and Next.js, and hands-on experience with Git, MongoDB, and Firebase.

Languages: Highly proficient in English with Hebrew as my native language.

Military Service: Combat Medic in the Armored Corps.