Dan Firstenberg

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EDUCATION

University of California, Davis | B.S. in Computer Science | Minor in Statistics   **December 2025**

Relevant Courses: Programming (**Python**), Programming (**C/C**++), OOP (C++), Data Structures (**Kotlin**), Computer Architecture (**Logisim**), Algorithm Design & Analysis, AI (**Python**), Operating Systems (**C**++)

PROJECTS

Distributed File System | Operating Systems   **May 2024 - June 2024**

- Local File System: Implemented on-disk storage, inode management, and hierarchical file structures.
- Distributed File System: Enabled multiple clients to access files simultaneously, inspired by Amazon S3.
- API Operations: Developed HTTP methods (GET, PUT, DELTE) to handle file and directory operations.
- Error Handling: Implemented transactional disk writes to ensure consistency and managed various error states (e.g. not found, insufficient storage, conflicts).
- Utilities: Created command-line tools for reading and debugging disk images, including file listings & metadata extraction.
- Technology Used: **Web Server, C**++

Online Marketplace | Personal Project Github   **June 2024 - July 2024**

- Authentication: Implemented user registration, login, and secure authentication mechanisms.
- User Communication: Enabled messaging system for users to communicate with each other.
- User Dashboard: Created a personalized dashboard for users to manage their listed items and purchases.
- Form Handling: Developed and customized forms for item listings, user profiles, and transactions.
- Technology Used: **Django, Python**

Music Social Media App | Personal Project Github   **September 2022 - Present**

- Full-Stack Dev: Developed a social media mobile application using the **Flutter** framework and **Dart** language.
- Data Integration: Integrated **Firebase**, optimizing data structures for efficient mobile app performance.
- Data Retrieval: Implemented advanced searching algorithms and caching systems enhancing data retrieval processes.
- Authentication: Implemented secure user authentication with email verification.
- UI/UX: Designed intuitive and engaging user interfaces through research and application of UI/UX principles.
- Collaboration: Worked closely with a team of developers on both front-end and back-end design.
- User Feedback: Ran beta testing and incorporated feedback to improve application performance and usability.
- Technology Used: **Flutter, Dart, Firebase**

PROFESSIONAL EXPERIENCE

Software Engineer Intern | Stealth EdTech Startup | Remote   **June 2024 - Present**

- Leading the development of a chess education coach from the ground up.
- Managing project roadmap and timeline to ensure on-time delivery of milestones.
- Utilizing **Stockfish AI** alongside other evaluation metrics to devise a personalized chess experience.
- Collaborating with a cross-functional team of designers and developers to ensure a comprehensive and user-friendly application
- Technology Used: **Next.js, React, Material UI, TypeScript, Firebase**

TECHNICAL SKILLS

Programming Languages/Frameworks: Python, Java, C++, C, Kotlin, JavaScript, Django, HTML/CSS, Flutter, Dart, FlutterFlow, Assembly, React, TypeScript, Firebase

Languages: English (Native/Bilingual), Hebrew (Native/Bilingual)