Simone Dunbar

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EDUCATION

Brown University, *Sc.B. Applied Math - Computer Science*, GPA: 4.0   Providence, RI | **Expected Graduation:** May 2026
Relevant Courses: Introduction to Software Engineering, Computer Vision, Machine Learning, Interaction Design, Introduction to Computer Systems, Program Design with Data Structures and Algorithms, Statistical Inference, Linear Algebra

TECHNICAL SKILLS & PROJECTS

Java, Python, TypeScript, JavaScript, CSS, HTML, C, React, MATLAB, Solidworks, Fusion360, ReasonML, Figma
PitchPro+, Microsoft Office, Google Suite,

Nourish – *full stack*
Currently developing a web application using React Vite and Node.js designed for student-athletes. The app enables users to log practice details such as times, intensities, and activity types, generating a personalized fueling dashboard. This dashboard helps athletes optimize their nutrition by identifying the best times to eat and recommending macronutrients for proper fueling before practice or recovery afterward.

SeatSeeker – *full stack*
With a team, created web application where users can search for events as they would on major ticketing platforms VividSeats, Seatgeek, and Stubhub and receive results showing the cheapest ticket options from all three sites. There are also parameters including location, date, and time that will sort the retrieved tickets into a preferred order. This web app utilizes web scraping, web APIS, and sorting algorithms.

Mocked REPL – *Web UI, mocking*
Used TypeScript and React to design the frontend of a REPL application that ran with mocked data.

Server – *Web APIs, mocking, strategy pattern*
Created a server with endpoints loadcsv, searchcsv, viewcsv, and broadband using Spark Java. The broadband endpoint requests to the US Census API to retrieve broadband information for state county pairs in the US. The csv endpoints parse and search CSVs.

Database – *multithreaded/concurrent programming*
Implemented a thread-safe database using POSIX mutexes, read/write locks, and conditional variables that supported commands to add, delete, and query nodes (files) as well as print the database.

Shell – *string parsing, processes, system calls*
Implemented a shell that read input from the user and could perform built in commands; supports three file redirection symbols. Programs can be executed with their arguments. Processes can be run simultaneously in the foreground and background. SIGINT, SIGTSTP, SIGQUIT are ignored in the shell, but not in child processes.

WORK EXPERIENCE

JPMorgan Chase, *ABP Software Engineering Fellow*   Plano, TX | June 2024 – July 2024
- Built fintech prototypes for banking tools, leveraging agile methodologies to drive innovation.
- Attended professional development workshops, gaining expertise in financial technology and industry best practices.
- Delivered technical solutions to senior engineers and stakeholders, enhancing communication and presentation skills.

Brown University, *Teaching Assistant Calculus I & Calculus III*   Providence, RI | Aug 2023 – May 2024
- Held 6-8 hours of weekly conference sections and office hours where I reviewed concepts taught in lecture, led problem solving, and answered questions
- Graded 180 problem sets and quizzes for up to 4 hours each week

Brown University, *Student Ambassador*   Providence, RI | June 2023 – Current
- Led campus tours for groups of up to 50 prospective students and families, enthusiastically presenting the university
- Spoke on panels that cover a wide range of prospective student interests, providing insight into the student experience

LEADERSHIP EXPERIENCE

Brown University, *Division I Track & Field Athlete*   Providence, RI | Sep 2022 – Current
- Balanced 20+ hours of training per week with a full course load

Ink@Brown, *President and Founder*   Sharon, MA | Dec 2023 - Current
- Founded and presided over an upcycling and printing club, ensuring smooth and effective overall functioning.
- Managed e-board communication and liaised with university administration to coordinate club activities and operations

ADDITIONAL SKILLS & INTERESTS

Languages: French: Intermediate, English: Native
Interests: Traveling, Upcycling, Thrifting, Community Involvement, Track and Field