

John Bagwell

Software Engineer — Backend & Systems

San Jose, CA

[LinkedIn](#) | [GitHub](#)

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SKILLS

Languages:

Java, JavaScript, TypeScript, C, SQL

Backend / Web:

Node.js, Express, REST APIs, Authentication, HTML, CSS

Databases:

PostgreSQL, MySQL, MongoDB

Systems / Tools:

Git, Linux, VS Code, Unit Testing

Concepts:

Data Structures, Algorithms, System Design, Systems Integration, Debugging

Projects

Multiplayer Card Game Backend (Bullsh*t) — Node.js, PostgreSQL, TypeScript

[Demo](#) | [GitHub](#)

- Built backend systems for a multiplayer bluffing card game supporting 3–8 players
- Designed player authentication, game lobbies, turn-based game flow, and state management
- Implemented database migrations and schema versioning using node-pg-migrate
- Emphasized data integrity, concurrency handling, and game state consistency
- Enabled real-time multiplayer gameplay with synchronized turn-based state management

Coffee Spot — Study Space Finder — Next.js, React, Node.js, MongoDB, TypeScript, Tailwind

[Demo](#) | [GitHub](#)

- Collaborated on a team to build a full-stack web application allowing users to discover and review study spaces
- Implemented authentication and user accounts using NextAuth.js
- Designed database schema and REST APIs for reviews, ratings, and location data
- Built responsive UI components using Tailwind CSS
- Deployed the application using Vercel

Linux Device Driver – Caesar Cipher — C, Linux Kernel

- Developed a Linux character device driver implementing a Caesar cipher
- Implemented kernel-space read/write operations and user-space interaction
- Gained experience with kernel modules, memory management, and system calls

Custom FAT File System Initialization — C

- Implemented core components of a FAT-based file system including volume control block initialization
 - Managed free space tracking and low-level file system structures
 - Worked with raw disk blocks and persistent storage abstractions
 - Strengthened understanding of operating system storage internals\
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EDUCATION

San Francisco State University — San Francisco, CA

Bachelor of Computer Science - Dec 2025

EXPERIENCE

Kaiser Permanente, San Jose - Inpatient Pharmacy Technician

December 2013 - PRESENT

- Work in a high-volume hospital pharmacy environment where accuracy and patient safety are critical
- Follow strict multi-step verification procedures to ensure medications are prepared correctly
- Collaborate with pharmacists, nurses, and medical staff to resolve medication and workflow issues
- Maintain detailed documentation while complying with hospital safety and regulatory requirements
- Known for reliability and ability to perform well in high-pressure situations

O'Connor Hospital, San Jose - Inpatient Pharmacy Technician

June 2013 - August 2017

- Supported inpatient pharmacy operations in a fast-paced hospital environment
- Prepared IV medications and handled hazardous drugs under strict safety protocols
- Adapted quickly to new systems, workflows, and compliance requirements