

Daniel Dong

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WORK EXPERIENCE

Software Developer <i>Samaritan Ministries International</i> Peoria, Illinois	July 2024 - Present
<ul style="list-style-type: none">Engineered a recursive C# algorithm distributing \$2M/month across a \$20M+/year bill-sharing program, preventing billing spikes and reducing 300+ support calls monthlyBuilt an automated Bill-Sharing service processing \$200K/month and 1,000+ bills per run, eliminating 50+ hours of monthly work for ProcessorsDelivered production updates and features to a large-scale React application serving 250K+ members for bill management, share tracking, and real-time in-app messaging	
Software Engineer Intern <i>Suitcase</i> Ann Arbor, MI	May 2023 - August 2023
<ul style="list-style-type: none">Architected the full-stack solution for Suitcase, a banquet room visualization tool, enabling dynamic 3D asset management and real-time user interactionsDeveloped Django backend APIs to serve the Unity frontend, managing user, vendor, and product data efficientlyOptimized a PostgreSQL database and asset delivery via AWS S3/CloudFront, achieving 60% faster room loading times for 5000+ 3D models	
Software Engineer Intern <i>Altair Engineering</i> Irvine, California	May 2022 - August 2022
<ul style="list-style-type: none">Developed automated Python scripts to refactor thousands of Fortran77/90 files—eliminating deprecated functions, unused variables, and syntax errors—to modernize the codebase and improve development efficiency	

TECHNICAL SKILLS

Languages: C#, C++, Python, JavaScript, SQL, HTML/CSS, Java, TypeScript, Kotlin

Frameworks: .NET Core, Entity Framework, Django, React, Vue.js, Node.js

Tools/Platforms: Git, AWS (EC2, S3, RDS, CloudFront), Azure, PostgreSQL, SQLite, Moq, Linux, Visual Studio

RELEVANT PROJECTS

Multi-Threaded Network Fileserver <i>C++</i>	
<ul style="list-style-type: none">Engineered a network file server with socket programming for efficient client-server communication with multiple clientsImplemented multi-threading to manage concurrent client requests with thread synchronization for high server responsiveness and effective resource allocationDeveloped read, write, create, & delete file system functionalities with crash consistent protocols to ensure data integrity	
Pager for Virtual Memory Management <i>C++</i>	
<ul style="list-style-type: none">Designed an external pager for virtual memory management in application processes, handling read/write faultsCreated a page fault handling system, employing C++ smart pointers to manage page table entriesExecuted thread-safe synchronization in a multi-process environment with mutex, lock_guard, & shared_lock for deadlock prevention and RAII-based resource control	
RANKED – Offline-First Ranking App <i>React Native, TypeScript</i>	
<ul style="list-style-type: none">Built a cross-platform mobile app for creating and managing custom rankings using React Native, with Supabase for authentication and cloud synchronizationImplemented an offline-first architecture with local SQLite storage as the primary data source and background sync for remote updates and conflict resolutionEnsured data consistency through transaction-safe operations, rank offset handling, and optimistic updates with automatic rollback on failure	

EDUCATION

University of Michigan - Ann Arbor <i>B.S. in Computer Science and Cognitive Science</i>	April 2024
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Relevant Coursework: Data Structures and Algorithms, Web Systems, Operating Systems, Database Management Systems, Machine Learning, Mobile App Development, Computer Vision

Interests: Sports (Basketball, Tennis, Volleyball, NBA), Music (Vocals, Guitar, Drums, Songwriting), Cooking, Baking
Fluent Languages: English, Mandarin, French