

EDUCATION

Iowa State University <i>Bachelor of Science in Software Engineering</i>	Expected: 05/2026 <i>Ames, Iowa</i>
Iowa State University <i>Bachelor of Arts in Philosophy</i> GPA: 3.56	Expected: 05/2026 <i>Ames, Iowa</i>
Relevant Coursework: Operating Systems, Software Security and Verification, Object-oriented Programming, Software Development Practices, Computer Architecture, Database Management Systems, Probability and Statistics, Software Testing, Advanced Programming Techniques, Computation Theory, Software Architecture and Design, Algorithm Design and Analysis, Discrete Mathematics, Data Structures & Algorithms	

EXPERIENCE

CyLife <i>Java, Spring Boot, MySQL, JavaScript, HTML/CSS, Android Studio, Git</i>	08/2024 – 12/2024
<ul style="list-style-type: none">Led backend development for a full-stack Android application, utilizing Spring Boot for API development, Android Studio for mobile integration, and MySQL for relational data storage, centralizing student clubs and organizationsDesigned and implemented WebSocket-based real-time chat and notification systems, boosting user interaction and enabling instant communication between club members and providing real-time event updatesDeveloped and optimized MySQL database schema with efficient indexing and entity relationships, ensuring scalable and high-performance data management for users, clubs, and events	
Dungeon Crawler - Questvein <i>C++, C, Lex, Yacc, Git</i>	1/2025 – Current
<ul style="list-style-type: none">Implemented algorithms such as Perlin Noise for procedural terrain generation and Dijkstra’s Algorithm for dynamic pathfinding, utilizing data structures such as Fibonacci Heaps for optimized performance in large-scale environmentsDeveloped and integrated a custom file I/O system to save and load dungeon states in a unique binary format, ensuring data integrity with big-endian conversions and minimal complexity for usersConstructed a custom parser using Lex and Yacc to process game entities, including items, weapons, and enemies, promoting dynamic level configurations and distinct player-controlled interactionsEmployed modular programming principles with separate compilation units, leveraging header files and a Makefile, for maintainability and scalability	
Home Haven <i>JavaScript, React.js, Node.js, Express.js, MongoDB (MERN)</i>	10/2024 – 12/2024
<ul style="list-style-type: none">Developed a RESTful API using Express.js and MongoDB, enabling secure user authentication, trip bookings, and data retrieval for seamless frontend integrationCreated a responsive and user-friendly frontend for Home Haven using the MERN stack, integrating MongoDB, Express, and Node.js to create seamless interactions with backend servicesDesigned and implemented scalable user management, including account creation, updates, and deletions, ensuring efficient data handling and secure transactions with the MongoDB databaseDirected an intuitive and user-friendly interface with React state management and hooks, ensuring smooth navigation and interactivity for customers	

TECHNICAL SKILLS

Languages: C++, C, Java, TypeScript, JavaScript, HTML/CSS, Python, Kotlin, Assembly
Frameworks/Tools: Spring/Spring boot, Angular, React.js, Node.js, Express.js, Git, Lex, Yacc, MySQL, MongoDB, Neo4j, Android Studio

CLUBS AND ACTIVITIES

Ames Collegiate Chess Club, Iowa State University	10/2022 – Present
Computer Science and Software Engineering Club (CSE), Iowa State University	01/2023 – Present
Birding Club, Iowa State University	08/2023 – Present
Mountaineering and Climbing Club, Iowa State University	08/2023 – Present