Ben Xiang

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Education

University of Colorado Boulder *Boulder, CO*

BA in Computer Science, Minor in Business. GPA: 3.297 *Aug. 2019 - May 2024*

- **CS Courses:** Algorithms, Computer Systems, Data Structures, Principle of Programming Language, Software Development Methods and Tools.
- **Business Courses:** Introduction to Real Estate, Principles of Accounting, Principles of Finance, Principles of Management, Principles of Marketing.

Work Experience

University of Colorado Boulder, SWARM-EX *Boulder, CO*

Software Engineer *May 2023 - Present*

- Designed and implemented an integrated block diagram illustrating the precise deployment process of solar panels.
- Collaborated with aerospace engineers to design and develop code for solar panel deployment.
- Coded and debugged solar array deployment code, prioritizing readability and optimizing execution efficiency.

University of Colorado Boulder *Boulder, CO*

Computer Science Course Assistant *Aug. 2021 - Present*

- Provided technical assistance as a Course Assistant for weekly computer science labs.
- Facilitated weekly lab and homework sessions for a large group of 150 computer science students.
- Dedicated 10 hours per week to conducting office hours, providing personalized assistance to students with homework and lab assignments.
- Provided expert assistance in debugging programming code, resulting in consistently high project and assignment scores ranging from 90% to 100%. This support significantly contributed to at least 80% of the class achieving an impressive grade of 85% or higher in the course.

Projects

MovieHasher *Boulder, CO*

University of Colorado Boulder *Apr. 2023 – May 2023*

- Designed and developed a high-performance C++ application using hash chaining and skip list hashing for scalability and performance optimization.
- Built a data parsing system to efficiently handle 1000+ of movie data and integrate it into a high-performance hash table.
- Created an intuitive and user-friendly interface for easy access to movie information and director details.
- Implemented effective strategies to prevent memory leaks and ensure application stability.
- **Technical Skills:** Algorithm, C++, Data Structure, VS Code.
- **Soft Skills:** Presentation Skills, Teamwork, Time Management.

Recruit Me *Boulder, CO*

University of Colorado Boulder *Sep. 2021 – Nov. 2021*

- Led a team of 7 students to design and develop a robust job search platform.
- Implemented a secure algorithm and database system to store and retrieve user login information, incorporating advanced encryption methods to safeguard sensitive data, including emails and encrypted passwords.
- Engineered a sophisticated password encryption algorithm, utilizing 10-digit codes to enhance data security and protect user privacy.
- Implemented a sophisticated API that seamlessly presents an extensive array of job opportunities, aligning with users' specified job title and location preferences.
- **Technical Skills:** Docker, HTML/CSS, JavaScript, Jira, Node.js, VS Code.
- **Soft Skills:** Leadership, Presentation Skills, Teamwork, Time Management.

SyncFlow *Boulder, CO*

University of Colorado Boulder *Apr. 2021 – May 2021*

- Led a team of two students in designing and developing a robust version-control project, ensuring effective management of file revisions and facilitating seamless collaboration among team members.
- Implemented a sophisticated algorithm to compare hundreds of words in a file with a new file. The algorithm intelligently adds any differing content to the file with a new version, ensuring accurate tracking and maintaining version integrity.
- **Technical Skills:** C++, Data Structure, VS Code.
- **Soft Skills:** Critical Thinking, Leadership, Logical Thinking, Presentation Skills, Teamwork, Time Management.

Skills

Programming C/C++, HTML/CSS, JavaScript, Node.js, Python, Scala.

Miscellaneous Figma, Git/GitHub/GitLab, Jira, Microsoft Office, VS Code.

Soft Skills Critical Thinking, Leadership, Logical Thinking, Presentation Skills, Teamwork, Time Management.