Ashwin Jain

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EDUCATION

University of Illinois at Urbana Champaign <div align="right">Champaign, IL</div>
Bachelor of Science in Computer Science + Economics <div align="right">*Aug. 2021 – May 2025*</div>

PROJECTS

Linux Shell | *C, Linux* <div align="right">September 2023</div>
- Designed and implemented a fully functional Linux shell using C, providing users with a customizable and efficient command-line interface
- Implemented background process support, enabling users to run commands concurrently and enhancing multitasking capabilities
- Ensured thread-safe execution within tasks distributed among various processes to prevent data concurrency issues

Memory Allocator | *C, Linux, Valgrind* <div align="right">October 2023</div>
- Designed and implemented a highly efficient memory allocator in C utilizing linked lists that performed with 94% efficiency relative to the standard C library memory allocator
- Conducted comprehensive memory profiling and analysis using tools like Valgrind to identify and resolve memory leaks and inefficiencies

Taco Bell Path | *C++, Python, Git* <div align="right">November 2022</div>
- Used Dijkstra's shortest path algorithm to determine the shortest path from Champaign to Chicago that passes through the most number of Taco Bells
- Web scraped to generate a csv file containing every Taco Bell in Illinois and its coordinate location
- Wrote test scripts to test our implementation of Dijkstra's algorithm and our graph data structure
- Utilized Git version control to collaborate with 3 other team members

UIUC Gym App | *Java, HTML, CSS, React Native, JUnitTest, Git* <div align="right">September 2022 - present</div>
- Leading and mentoring a team of 4 developers in the design and development of an app that tracks machine/equipment availability at the UIUC gym using React, Node.js, Java, and other smaller frameworks
- Fostered a collaborative and innovative work environment by encouraging knowledge sharing, cross-functional communication, and continuous learning
- Stayed updated with new advancements to technologies used in the product to provide strategic direction and ensure the team's skill set remained current

EXPERIENCE

Team Member <div align="right">March 2020 – June 2022</div>
Blaze Pizza <div align="right">*Brentwood, TN*</div>
- Provided attentive and friendly customer service, ensuring a positive dining experience for patrons
- Handled cash transactions, operated the point-of-sale system, and accurately balanced cash register at the end of each shift
- Demonstrated a proactive approach in assisting fellow team members during peak hours, ensuring smooth operations and minimizing customer wait times
- Trained and mentored new team members to ensure they quickly learned the required skills and processes

Camp Counselor <div align="right">Summer 2019</div>
Montgomery Bell Academy <div align="right">*Nashville, TN*</div>
- Led and supervised a group of 20 elementary and middle school boys, ensuring their safety and engagement throughout a full day of sports-related activities and stations
- Prioritized the cultivation of key virtues, including teamwork and humility, to foster their personal growth and development

TECHNICAL SKILLS

Languages: Java, Python, C/C++, SQL, JavaScript, HTML/CSS, R, Kotlin, Swift, MIPS Assembly, System Verilog
Frameworks: React Native, Node.js, Express.js, JUnit, Socket.io
Developer Tools: Git, Docker, VS Code, Eclipse, Valgrind, Linux
Libraries: pandas, NumPy, Matplotlib, Scikit-learn, PyTorch

Certifications: Google Data Analytics