Dallas Coggins

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Summary

Software developer with a strong background in C++ and Python, specializing in performance optimization, networking, and systems development. Experienced in designing and implementing networked applications, concurrent systems, and real-time data processing. Passionate about building efficient and scalable software solutions.

EDUCATION

Texas A&M University

College Station, TX

Bachelor of Science in Computer Science, Cybersecurity Minor, Game Development Minor August 2021 – May 2025 GPA: 3.937/4.0

EXPERIENCE

 $LIVE\ Lab$

Software Developer

November 2023 - Present

College Station, TX

- Developed and optimized game systems in Unreal Engine using C++
- Implemented networked gameplay mechanics and replication strategies
- Collaborated in an Agile environment to improve game functionality, enhancing project efficiency through effective communication

Projects

Calamity Crew | Unreal Engine 5, C++, Multiplayer Networking

2024

- Developed a peer-to-peer multiplayer system, implementing replication strategies for smooth gameplay
- Designed and optimized network serialization to reduce bandwidth usage and improve latency
- Implemented authoritative game logic to mitigate cheating and maintain game state consistency

Reliable Data Transfer over UDP | C++, Sockets, Networking

2024

- Implemented a custom Reliable Data Transfer (RDT) protocol over UDP to ensure ordered, lossless communication
- Designed and implemented retransmission mechanisms using acknowledgments and sequence numbers
- Tested protocol resilience against packet loss, corruption, and out-of-order delivery

C++ Web Crawler | C++, Networking, Multithreading

2024

- Developed a high-performance web crawler that processes URLs from an input file and fetches content asynchronously
- Implemented parallelized HTTP requests using multithreading for efficient page retrieval
- Designed a URL queuing and de-duplication system to avoid redundant processing

LEADERSHIP

Texas Aggie Game Developers | Treasurer

August 2022 – July 2024

- Led workshops on networking for multiplayer games, teaching fundamentals of replication and latency mitigation
- Managed the club's budget and financial planning, ensuring sustained funding for events and projects

Aggie Society for Anime and Manga Art | Meeting Officer

December 2023 - Present

- Coordinated and led weekly social events, ensuring high member engagement
- Planned and executed activities that foster collaboration and creativity

TECHNICAL SKILLS

Languages: Java, Python, C/C++, JavaScript, HTML/CSS, Ruby

 ${\bf Databases:} \ {\rm SQL} \ ({\rm PostgreSQL}), \ {\rm MongoDB}$

Networking: TCP/UDP, WebSockets, Socket Programming, Distributed Systems, Network Protocols

Systems Development: Multithreading, Concurrency, Low-Level Optimization

Game Engines: Unreal Engine, Unity, Godot Tools: Git, Perforce, Plastic SCM, Docker, Linux