

Adithya Bellamkonda

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EDUCATION

University of Alabama in Huntsville (Huntsville, AL)

Aug. 2024 – May 2028 (Expected)

Bachelor of Science in Computer Science, Minor in Mathematics

GPA: 4.0/4.0

- **Relevant coursework:** Data Structures and Algorithms, Software Engineering, Deep Learning, Operating Systems, Design Analysis of Algorithms
- **Activities:** Data Science And AI Club (Vice President), Association Computing Machinery (Membership Chair), SASE (Society of Asian Scientists and Engineers), ICPC (President)

TECHNICAL SKILLS

Languages: C++, Python, Rust, C, Golang, Java, TypeScript, JavaScript

Databases: SQL (PostgreSQL, MySQL), Redis, MongoDB, Azure SQL

Technologies: Spring Boot, Django, NumPy, Pandas, Scikit-learn, TensorFlow/Keras

Software: Linux, AWS, GCP, Docker, Terraform, gRPC, GraphQL, Git

Concepts: Distributed Systems, System Design, Microservices, Networking, Concurrency

EXPERIENCE

Microsoft (Security Business) – Software Engineering Intern | Redmond, WA Summer 2026 (incoming)

WorldQuant – Quant Researcher (IQC) | Old Greenwich, CT

May 2025 - Present

- * Researched and validated **15+** systematic alphas across equities and ETFs.
- * Built a backtesting and data pipeline, reducing research turnaround time by **~4×**.
- * Implemented purged cross-validation and walk-forward testing, cutting out-of-sample decay by **35%**.

Susquehanna International Group – Quant Developer Intern | Bala Cynwyd, PA June 2025 - Aug 2025

- * Cut tick-to-trade latency **33%** ($180\mu\text{s} \rightarrow 120\mu\text{s}$) and raised throughput **2.5×** to 1M msgs/sec.
- * Built P&L attribution tracking **\$10M+** daily volume across 500+ instruments with **< 10ms** latency.
- * Implemented FPGA-accelerated order book parsing in Verilog/VHDL.

BB:X | Roblox – Software Developer for *Beyblade:Rebirth (64M+visits)* | Remote

May 2025 – Present

- * Shipped combat systems supporting **1,000+** concurrent users with **sub-100ms** latency.
- * Improved player synchronization reliability via custom RPC networking stack.
- * Launched real-time features driving **+20%** daily active users.

Corvid Technologies (Veritas) - Software Engineering Intern | Huntsville, AL

Aug 2024 - May 2025

- * Reduced message latency **3×** ($150\text{ms} \rightarrow 50\text{ms}$) by building gRPC pipelines for **1M+** daily events.
- * Improved HPC simulation speed **35%** by developing real-time C/C++ execution engines.
- * Cut Linux build times **25%** by automating Bash/CMake pipelines and dependency caching.

Madison CEO (CRM) - Software Engineering Intern | Madison, AL

May 2022 - Aug 2024

- * Scaled microservice throughput **45%** by building Java/Python services handling **12,000+** daily API calls.
- * Accelerated database performance **2.8×** by optimizing **60+** complex SQL queries.
- * Led development of a React-Redux feature, increasing user engagement by **20%**.

PROJECTS

CueAI | C++, Python, PyTorch, Pandas, Numpy, Scikit-learn, OpenCV, PyQt, ONNX

Feb 2025 – Present

- * Building CueAI, a high-fidelity pool simulation app using physics-based modeling and machine learning (**regression**) to predict ball trajectories using spin, angle, speed, table imperfections.

AWARDS/HONORS

Competitive Programming

2023 – present

- * ICPC competitor, codeforces rating: 2089 (CM) (top 80 (US)/3%) globally, USACO platinum level
- * ICPC 2025 Winter Huawei Challenge top 50 globally
- * IQC WorldQuant national level bound (top 8%) globally, current Quantitative Researcher
- * IMO (International Mathematics Olympiad) training camp invitee (top 0.02%)

College of Science Ambassador - (15 selected out of 1000+) applicants to guide incoming students

2023 - present

College of Science CS Ambassador - (1 selected out of 800+) applicants to facilitate CS students

2023 - present