

Adithya Bellamkonda

Huntsville, AL | adithya35756@gmail.com | adibell.dev | linkedin.com/adithyab | github.com/Adibell

EDUCATION

University of Alabama in Huntsville (Huntsville, AL)

Aug. 2023 – May 2027 (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: Proficient Python (4 years), C++ (3 years), C (3 years), Java (3 years) | Intermediate R (2 years)

Databases: MongoDB, Cassandra, InfluxDB, Azure SQL Database, SQL (PostgreSQL & MySQL)

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

Software: Apache Hadoop, AWS (S3:EC2:RDS: LAMBDA), GCP, GIT, Docker, Azure, Terraform

EXPERIENCE

Roblox – Software Developer for *Beyblade:Rebirth (55M+visits)* | Remote

June 2025 – Present

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

March 2025 - Present

- * Built gRPC data pipelines with Protobuf, reducing latency $3\times$ (**150ms**→**50ms**) for **1M+** daily messages.
- * Developed real-time signal simulation tools in C/C++, optimizing sensor propagation pipelines to handle classified workloads with up to **10x** spatial fidelity, improving execution time by **35%**.
- * Automated Linux-based simulations with Bash and CMake, improving cross-platform build consistency through POSIX sockets, reducing average compile times by **25%** across heterogeneous HPC environments.
- * Designed a modular React/Node.js interface, reducing config time by **50%** and supporting **5,000+** sub-second task calls/hour for **10+** users.

Madison CEO - Software Engineering Intern (Full Stack) | Madison, AL

Aug 2023 - May 2024

- * Implemented **6** decoupled microservices using Java and Python with Spring Boot and Flask, handling **12,000+** daily API requests, leading to a **45%** reduction in response latency and a **30%** server load decrease.
- * Led a 6-member cross-functional team to deploy a key React-Redux feature, boosting platform engagement to **800+** daily active users, and increasing session time by **20%** within 60 days.
- * Optimized **60+** complex MySQL queries, cutting page load times by **65%** and improving database response throughput by **2.8x**.

PROJECTS

Distributed Task Queuing System | *Golang, Redis, Docker, Prometheus, Docker, Grafana* Mar 2025 – Apr 2025

- * Designed a fault-tolerant distributed job system in Go using Redis and Docker, enabling parallel execution with retries and a DLQ for failure handling.
- * Integrated Prometheus and Grafana to monitor queue depth, task success rates, and worker performance in real time.

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.

Spring Boot Performance Optimizer Pro | *Java, Spring Boot, JUnit, DynamoDB, Langchain* Jan 2025 - Present

- * Developing an open-source AI-powered backend tool using Java, Spring Boot, DynamoDB, Langchain to boost API performance and code optimization using LLMs by at least 30% via real-time diagnostics, schema automation, and CI/CD integration.

AWARDS/HONORS

Competitive Programming

2024 – 2025

- * ICPC competitor, codeforces rating: 1763 (Expert) (top 20%) globally
- * IQC WorldQuant national level bound (top 20%) globally

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