ISHAN AKHOURI

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EDUCATION

University of Maryland Global Campus — College Park, MD — GPA: 4.0
Bachelor of Science in Computer Science, Dean's List — *May 2026*
- **Relevant Coursework:** Advanced Programming Languages, Computer Architecture, Concurrent Programming, Data Structures & Algorithms, Compiler Theory, Operating Systems

CERTIFICATIONS

AWS Certified Solutions Architect Associate | Amazon Web Services
Certified Kubernetes Administrator (CKA) | Cloud Native Computing Foundation
HashiCorp Terraform Associate | HashiCorp

EXPERIENCE

Cloud Engineer Intern — May 2023 – Aug. 2023
Aarisha Inc — *Remote*
- Architected production Kubernetes infrastructure supporting 25+ microservices with 99.9% uptime and improved reliability
- Implemented Infrastructure-as-Code using Terraform, automating deployments and reducing deployment time by 45%
- Optimized container orchestration and resource allocation in AWS, reducing cloud costs by 32% while improving performance by 45%
- Developed monitoring and logging solutions using CloudWatch to track system health and identify performance bottlenecks

Software Engineer Intern — June 2022 – Aug. 2022
Aarisha Inc — *Remote*
- Conducted code reviews for 12,000+ lines across distributed systems, identifying 50+ potential bugs before production
- Implemented CI/CD pipeline automation using Jenkins, streamlining regression testing and deployment processes
- Applied algorithmic optimization techniques to database queries, improving performance by 58%
- Reduced memory consumption by 35% through data structure refinements and cache optimization

Software Engineer Intern — Apr. 2020 – Aug. 2020
ARK Solutions — *Remote*
- Developed automated ETL pipeline processing 2M+ records with 99.9% accuracy using Python and SQL
- Optimized database queries and indexing strategies, reducing page load time from 2.1 to 0.6 seconds
- Created reusable React component library with TypeScript, adopted across 3 engineering teams

PROJECTS

TheoreticalComputerScience.com | *TypeScript, React, AWS, Full-Stack Development* — Present
- Developed comprehensive educational platform with 110,000+ lines of production TypeScript code
- Built interactive visualization engine with optimized rendering performance and responsive user interface

SAT Solver | *C++, Algorithm Optimization, Parallel Computing, Performance Engineering* — Present
- Engineered high-performance SAT solver implementing conflict-driven clause learning (CDCL) with modern optimizations
- Architected portfolio solver with thread-safe parallel search and efficient clause sharing mechanisms

Theorem Prover | *Functional Programming, Software Architecture, API Design* — Present
- Built compositional proof system with immutable state management and modular tactic infrastructure
- Implemented natural deduction calculus engine with extensible plugin architecture

TECHNICAL SKILLS

Languages: Python, TypeScript, JavaScript, C++, Java, SQL, Go, Bash, Rust
Cloud & DevOps: AWS (EC2, S3, CloudWatch, IAM), Kubernetes, Docker, Terraform, Jenkins, Git
Frameworks & Databases: React, Node.js, Express, PostgreSQL, Redis
Specializations: Infrastructure-as-Code, Container Orchestration, CI/CD Automation, Performance Engineering, Distributed Systems