

Education

George Mason University Honors College

BS, Computer Science. GPA: 3.92

August 2022 – May 2025

Awards/Achievements: **Summa Cum Laude**, Distinguished Academic Achievement, Senior Plus in Accelerated Master's Program, Dean's List all semesters

Relevant Coursework: Object Oriented Programming, Data Structures and Algorithms, Software Testing, Software Engineering, Formal Methods and Models, Mobile Application Development, Secure Programming, Database Fundamentals, Linear Algebra, Multivariate Calculus

George Mason University

MS, Computer Science, AI/ML Concentration. GPA: 3.78

January 2024 – May 2026

Relevant Coursework: Operating Systems, Intro to AI, Networking and Communication, Analysis of Algorithms, Machine Learning, Natural Language Processing, Data Mining, Deep Learning

Global Career Accelerator: Coding with Data: Extracurricular course - Gained hands-on experience in SQL and Python for data analytics, including data cleaning, visualization, and query optimization.

Experience

Airline Tariff Publishing Company (ATPCO), Herndon VA. — Mar 2025 – Present, Software Engineer Intern

- Developed API-compliant backend services in Rust, including a centralized test archive that improved reliability.
- Integrated Amazon S3 and Secrets Manager, enabling secure storage/retrieval of test results.
- Designed unit & integration tests that increased test coverage, and made bug fixes that strengthened service stability.
- Automated containerized deployments using Docker/Kubernetes and CI/CD pipelines in Jenkins/GitLab.
- Analyzed algorithmic performance of mission-critical airline pricing systems and developed a prototype that compared multiple algorithmic approaches to optimize performance.
- Further experience in Agile and Scrum methodologies.
- Worked with AWS Cloudformation to make infrastructural changes for different services.
- Developed a deployment design incorporating Argo workflows for an API testing service
- Infrastructure as Code (IaC) with Terraform and Terragrunt for AWS resource provisioning and management

Guidehouse Inc. (Client: HHS.gov Federal), McLean VA. — Jun 2024 – Aug 2024, Software Developer Intern

- Implemented backend features using Java Spring Boot and optimized SQL queries to improve system functionality.
- Developed React components and CSS updates to enhance portal usability and visual consistency.
- Conducted API & regression testing with Postman, identifying and resolving critical defects.
- Collaborated in Agile team workflows, increasing sprint velocity and gaining experience in Agile collaboration.

Network Contagion Research Institute (NCRI), Princeton, NJ. — Jan 2024 – Apr 2024, Computer Science Intern (Volunteer)

- Developed Python modules with Pytest automation, reducing manual QA cycles.
- Designed and deployed REST/FAST APIs backed by SQLite3 + Docker, streamlining research data pipelines.
- Contributed to analytic tools supporting large-scale disinformation research.

George Mason University, Fairfax, VA — Jan 2023 – May 2025, Teaching Assistant – Computer Science

- Led lab sessions for Object-Oriented and Low-Level Programming, guiding 20–25 students per class and improving comprehension of core concepts.
- Mentored students on debugging and software design, strengthening coding proficiency and problem-solving skills.
- Co-created solution keys for programming projects, improving grading efficiency.

Skills

Portfolio: <https://arjungiridhar.com/>

Programming Languages: Java, Python, C#, Rust, C, Go, SQL, Bash, CSS, x86 Assembly, JavaScript, TypeScript

Web Development & Frameworks: React, Node.js, Angular, Vue, Spring Boot, Bootstrap, REST APIs, JSON, XML, Maven, Cargo
AI/ML & Generative AI Systems: PyTorch, TensorFlow, scikit-learn; machine learning (classification, regression, clustering), model evaluation (Precision/Recall, F1, ROC), feature engineering, model deployment & monitoring, LLMs, Retrieval-Augmented Generation (RAG), vector databases, AI agents (tool calling, multi-step workflows), OpenAI API (chat, embeddings), LangChain, Hugging Face Transformers, semantic search, NLP, Prompt Engineering, Statistical Modeling

Cloud, DevOps & Deployment: AWS (S3, ECS, EKS, Lambda, Kinesis Firehose, Secrets Manager, CloudWatch), Docker, GitLab CI/CD, Jenkins, Azure (AKS), Terraform, Terragrunt, Containerization & API Deployment, Prometheus, Grafana, Data360

Data & Databases: PostgreSQL, MySQL, SQLite, MongoDB, Oracle (OCI), Pandas, NumPy, Data Engineering, Databricks

Software Engineering & Tooling: Agile/Scrum, Git, UML, OpenAPI, Code Documentation & Workflow Maintenance, API Integration, Testing & Validation, Performance Tuning, Microservices, SDLC

Testing & Debugging: JUnit, Pytest, Postman, GDB, Valgrind, Wireshark, TCPDump

Operating Systems: Ubuntu, Red Hat Linux, Windows, Android, iOS

Certifications: AWS Certified Cloud Practitioner, AWS Certified AI Practitioner