

Joseph F. Dyer

josephfrancisdyer@gmail.com • Vienna, VA 22180 • 540-687-0055

PROFILE	Senior Full-Stack Software Engineer with 4+ years of experience building scalable backend and web systems, specializing in distributed architectures, cloud-native services, and performance-critical applications.		
EDUCATION	B.S. in Computer Science, Virginia Tech GPA: 3.81 • Honors: Summa Cum Laude, Phi Beta Kappa	May 2021	
EXPERIENCE	Senior Software Engineer, Capital One	Mclean, VA • June 2025–Present	
	<ul style="list-style-type: none">Designed and developed backend components supporting an ACH redemption option for card rewards, enabling direct deposit of points through event-driven services built with Golang, AWS Lambda, SQS, and DynamoDB.Architected an idempotency strategy using DynamoDB to support active-active processing, prevent race conditions, and improve resiliency, establishing a pattern applicable to other redemption flows.Developed performance testing scripts and collaborated with a working group to identify bottlenecks, improving system throughput and reliability.Proactively surfaced and fixed critical issues during E2E and performance testing, improving overall system stability and release readiness.		
	Intermediate Software Engineer, The MITRE Corporation	Mclean, VA • May 2021–June 2025	
	<ul style="list-style-type: none">Led design and development of a 3-person team for an internal DevSecOps evaluation tool that informed a Sponsor’s contract award decision.Built reusable web components to streamline front-end development and ensure compliance with federal design standards across a Sponsor’s organization.Built full-stack MVP dashboards using Angular, Vue.js, Flask, and Express to demonstrate research capabilities and support Sponsor funding decisions.Used Pentaho, Python, and SQL to automate ETL processes for data analytics reporting, reducing manual effort and saving time for Sponsors.		
	Teaching Assistant (DSA), Virginia Tech	Blacksburg, VA • Aug 2020–May 2021	
	<ul style="list-style-type: none">Held office hours to explain complex algorithmic concepts and visually demonstrate advanced data structures to students.Assisted students in debugging and understanding challenging algorithm implementations through hands-on guidance.Evaluated student projects, focusing on algorithmic correctness, efficiency, and conceptual understanding.		
	Software Engineering Intern, The MITRE Corporation	Mclean, VA • Summers 2018–2020	
	<ul style="list-style-type: none">Delivered software enhancements that enabled sponsor collaboration on new user-facing capabilities, earning recognition for efficiency. (2020)Independently delivered AWS-based ETL solutions and contributed technical insights to a whitepaper on Cloud vs. Hybrid analytics solutions. (2019)Used Python, Pandas, and NumPy in Jupyter Notebooks to analyze large datasets and prepare data for modeling. (2019)Led a team of interns in stress testing an operational tool using Python to generate performance metrics for a sponsor deliverable. (2018)		
SKILLS	Programming: Python, JavaScript, Golang, SQL, Java, C++, C Frameworks: Angular, Vue.js, Express, Flask Cloud/AWS: S3, Glue, SageMaker, Redshift, EC2, Lambda Databases: PostgreSQL, Microsoft SQL Server, MySQL, Neo4j, MongoDB Tools: Git, Gitlab, Pentaho Data Integration, Jira, Docker, Kubernetes AI/ML: Pandas, NumPy, Jupyter Notebooks, PySpark		