

# Bryan Eaton

Backend Engineer

[bryan.eaton@example.com](mailto:bryan.eaton@example.com) — [linkedin.com/in/bryaneaton](https://linkedin.com/in/bryaneaton) — [github.com/bryaneaton](https://github.com/bryaneaton)

Knoxville, TN

## Professional Summary

Seasoned Backend Engineer with 10+ years of experience designing and implementing mission-critical systems at web scale. Proven expertise in building scalable architectures, optimizing platform performance, and developing robust data pipelines that serve millions of users. Strong background in cloud-native technologies, containerization, and database optimization with hands-on experience in Kubernetes, Docker, and modern DevOps practices. Active open-source contributor with demonstrated ability to deliver high-performance solutions in collaborative, cross-functional environments.

## Technical Skills

Languages	&	Python, Java, C#, Go, Spring Boot, RESTful APIs, GraphQL
Frameworks:		
Infrastructure	&	Kubernetes, Docker, OpenShift, Airflow, CI/CD (GitHub Actions, GitLab), Terraform
DevOps:		
Databases & Storage:		PostgreSQL, SQL Server, MongoDB, Elasticsearch, Amazon S3, Redis, Database Optimization
Message Queues & Streaming:		Apache Kafka, RabbitMQ, Celery, Real-time Data Processing
Cloud & Monitoring:		AWS, Azure, Prometheus, Grafana, ELK Stack, Performance Monitoring
Data Processing:		Apache Spark, PySpark, ETL Pipelines, Data Lake Architecture, Parquet

## Professional Experience

**Backend Engineer / Data Platform Engineer**  
RegScale, Knoxville, TN

*July 2022 – August 2025*

- Architected and deployed scalable backend systems supporting compliance automation platform serving enterprise clients with mission-critical security requirements
- Engineered high-performance disk caching solution reducing API call overhead by 90% and dramatically improving system responsiveness for massive data volumes
- Built and maintained production-ready REST APIs and CLI tools ([regscale-cli](#)) with 50K+ downloads, demonstrating open-source contribution and community impact
- Implemented Celery-based distributed task queues for parallel execution of long-running jobs, enabling horizontal scaling and fault-tolerant processing
- Designed containerized development environments using Docker and Docker Compose, reducing development cycle time and ensuring consistent deployment across environments
- Developed robust data parsers handling diverse schemas from cybersecurity tools (Wiz, Tenable, Burp Suite) with comprehensive validation and error recovery
- Created CI/CD pipelines for automated testing and deployment to PyPI, implementing DevOps best practices for continuous delivery
- Optimized data serialization strategies using pickle and JSONL with compression (gzip/lz4) to minimize storage footprint and improve I/O performance

**Backend Engineer / Data Platform Engineer**  
Shell Energy, Houston, TX

*July 2021 – July 2022*

- Built enterprise-scale data lakehouse infrastructure using Dremio, processing terabytes of structured data from OLTP systems for analytical workloads
- Developed PySpark-based ETL pipelines for high-performance data transformation and loading, optimizing query

performance for business intelligence applications

- Configured Apache Airflow as orchestration engine for automated job scheduling, ensuring reliable data pipeline execution and monitoring
- Migrated legacy VBA-based ETL systems to Python, improving maintainability and enabling modern DevOps practices
- Designed database access layers using JDBC and optimized SQL stored procedures for enhanced query performance
- Collaborated with cross-functional infrastructure, network, and application teams to ensure data quality, availability, and system reliability

## Backend Systems Developer

*Oct 2018 – July 2021*

**Oak Ridge National Laboratory**, Oak Ridge, TN

- Designed and developed RESTful APIs using Spring Boot for mission-critical government applications with strict security requirements
- Implemented secure RabbitMQ messaging integration within classified networks (SIPRNet), ensuring reliable inter-service communication
- Configured Hazelcast distributed in-memory cache with intelligent eviction policies (LRU, LFU) for high-performance image data retrieval
- Built scalable Celery task queues managing large-scale data processing jobs, including nationwide COVID-19 datasets during the pandemic
- Developed complex PostGIS spatial queries for geospatial applications, optimizing database performance for location-based services
- Integrated R-based statistical computing with Airflow using DockerOperator for consistent environment management and dependency isolation
- Implemented comprehensive testing strategies using JUnit and monitored application performance with Spring Actuator

## Backend Developer / Data Engineer

*Jan 2014 – Apr 2018*

**Covenant Transport**, Chattanooga, TN

- Optimized database performance through strategic indexing and stored procedure enhancement for high-volume OLTP systems
- Designed and implemented data mart architecture using SQL Server for enterprise business intelligence solutions
- Developed ETL workflows processing millions of transportation records, ensuring data integrity and optimal query performance
- Created scalable data warehouse solutions with centralized fact tables and dimensional modeling for executive reporting
- Analyzed and optimized query execution plans, achieving significant performance improvements in mission-critical applications

## Key Achievements

---

- **Open Source Impact:** Principal developer of RegScale CLI with 50K+ PyPI downloads, demonstrating community engagement and code quality
- **Performance Optimization:** Achieved 90% reduction in API response times through intelligent caching and data serialization strategies
- **Scalable Architecture:** Built distributed systems capable of processing terabytes of data using modern streaming and batch processing frameworks
- **DevOps Excellence:** Implemented comprehensive CI/CD pipelines reducing deployment time and ensuring reliable software delivery
- **Cross-Platform Integration:** Successfully integrated diverse systems and APIs, enabling seamless data flow across enterprise environments

## Education

---

Bachelor of Science in Computer Science  
University of Technology

*Graduated 2005*