# Thomas Stetson

Dedham, MA | 508-246-5067 | testetson@gmail.com |LinkedIn | GitHub

Seasoned Automation and Cloud Engineer with expertise in test automation for distributed systems, cloud-native architecture, and scalable CI/CD pipelines. Dedicated to team mentoring, enhancing quality, and automating rapid software development processes.

Authorized to work in the US for any employer.

## Experience

### Sr. Automation Engineer

CHAOSSEARCH-Boston, MA July 2021 to February 2025

As part of a small engineering team developing a highly scalable real-time Cloud Object Storage database with search, SQL, and monitoring support, designed/implemented test automation and enhanced existing automation infrastructure.

- Mentored junior team members and created training documentation.
- Collaborated with product developers to meet test coverage and feature requirements.
- Developed and automated validation tools on AWS, GCP, and Databricks/Spark.
- Documented internal automation tools and best practices.
- Standardized indexing and query testing with a single test harness using HOCON-based DSL.
- · Tracked work with Jira tickets.
- Designed and implemented unit, component, and integration tests using ScalaTest and PyTest.
- Integrated third-party test suites based on product integrations.
- Managed container and JVM deployment platforms, including proprietary orchestration systems.
- Developed and executed performance benchmarks and ensured continuous quality gates.
- Used Spark to scale data generation and ETL processes.

### Senior Software Engineer in Test

Eze Software-Boston, MA May 2016 to July 2021

Worked in an Agile Scrum environment with a development team that maintained a near zero count of escaped bugs working on a Cloud-based Investment Management platform. Developed a QA Round Table to help share knowledge across the QA team and mentor junior colleagues.

- Maintained CI/CD with Jenkins and bash scripting; transitioned from TeamCity.
- Migrated services to Linux-based Docker containers in Rancher.
- Automated real-time data streaming system testing, including Server/Server and Client/Server interactions
- Designed and tested an elastically scaling solution for portfolio analytics and trading calculations.
- Used Splunk for real-time monitoring and alerting of subsystems.
- Architected test infrastructure, set best practices, and designed a third-party app integration module.

#### Quality Assurance Engineer

IntervalZero, Inc-Waltham, MA March 2013 to May 2016

Product Test Plan design, implementation, and execution.

- Tested Real-time operating systems including Win32 APIs, Kernel Drivers, and RT-TCP/IP interfaces.
- Used C#, C, and C++ to test SDKs across various Windows platforms.
- Tested command-line and GUI driven tools.
- Designed test automation using internal C# applications, PowerShell scripts and batch files.
- Development and maintenance of testing tools and utilities in C#.
- Mentorship of interns and new hires.

### Education

## **Bachelor of Science in Computer Science**

 $Bridge water \ State \ University \ - \ Bridge water, \ MA$ 

December 2012

## **Projects**

### Abelian Sandpile Model implementation

- Language & Tools: Python, NumPy, PyTest, Linting, GitHub Actions
- Additional Info: https://github.com/testetson22/abelian\_sandpiles

#### Scalable ETL Utility

- Language & Tools: Scala, Spark DataFrames, Scallop, AWS S3 Java API, JVM
- Additional Info: Created at ChaosSearch for converting test data at high scale and complexity.

### Skills

### Automation & Quality Engineering

- Languages: Python, Java, Scala, JavaScript, C++
- Dev Environments & Tools: VSCode, JetBrains IDEs
- Cloud Platforms: AWS (S3, ECS and EC2 APIs), GCP, Databricks
- Databases: SQL (Trino, MySQL, MSSQL), NoSQL (MongoDB, DynamoDB, Cassandra)
- Test Automation & QA: Selenium, Cypress, JUnit (and most derivatives), Performance Testing, API Testing
- CI/CD & DevOps: Gradle, Jenkins, Docker, Git, Bitbucket Pipelines, Infrastructure as Code, Terraform
- Scripting & Automation: Bash (and most Shell flavors), Newman, PowerShell, Batch

## Project Management & Agile Methodologies

- Software Development Life Cycle: Agile Scrum, Project Planning, Scoping, Development Management
- Collaboration & Documentation: Atlassian JIRA, Confluence, Microsoft PowerPoint

## Data Analysis & Monitoring

- Analysis: Anaconda, Jupyter, Databricks
- Monitoring: Splunk, InfluxDB
- Visualization: Grafana, OpenSearch Dashboards, Superset