

# Johnathan Gilday

Software Engineer with a breadth of experience in developing modern applications, and a depth of knowledge in Java based technologies. Experience includes providing technical leadership for a hypergrowth application security startup, supporting mission critical systems for the US Intelligence Community, and prototyping next generation user interfaces for the US DoD.

## EXPERIENCE

### Contrast Security — *Principal Software Engineer*

MARCH 2017 - PRESENT

- Led technical direction for Contrast's flagship Java agent product. Developed novel, automated, real-time security analysis for web applications using JVM bytecode transformation. *ASM, Java Instrumentation, Dagger*
- Tuned multi-threaded Java agent security analysis that runs within performance sensitive Java APIs in customers' production systems by reducing lock contention, implementing caching, introducing lazy evaluation. *JMH, JFR, JMeter, YourKit*
- Trained new developers and assisted new managers as the team grew 4x in less than 3 years. Led two Effective Java book clubs to hone the team's Java skills and catalyze team gelling. Met individually and collectively with the team to maintain a written, long-term vision for the team's success to foster team culture.
- Redesigned a Java agent integration testing system focused on developer productivity that reduced test feedback time from once every several weeks to several times daily. Scaled the system to run over 350 containerized test applications in each test suite. *Gradle, Docker, JUnit, Bitbucket Pipelines, AssertJ, OK HTTP, RabbitMQ*
- Provided backup and training to the sales department for high-profile prospects. Investigated over 50 escalated customer support issues. Assisted customers with product adoption challenges.
- Built a serverless data collection system and data lake to support business intelligence and marketing campaigns. System's mean time between failures is less than once per year. *AWS Lambda, Kinesis, Redshift, CloudFormation, TypeScript*

Baltimore, MD

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<https://johnthangilday.com>

[Blog](#)

[GitHub](#)

[Stack Overflow](#)

[Baeldung](#)

## JAVA SKILLS

Maven, JVM Bytecode transformation, agent development, Java EE REST with JAX-RS (Jersey), JPA (Hibernate), JMS, OGSi, Jackson, Spring, Scala

## CLOUD SKILLS

AWS, OpenStack, Docker, Ansible, Jenkins, RHEL and Ubuntu based Linux, Vagrant, Packer, Jenkins

## WEB SKILLS

Node.js, Angular.js 1.5, Gatsby, webpack

## DATABASE SKILLS

Berkeley DB, Cassandra, RDBMS

## PROCESSES

Agile, Scrum, Kanban, TDD

## **Next Century Corporation — Senior Software Engineer**

NOVEMBER 2012 - MARCH 2017

- Deployed a suite of cross-domain solutions. Focused on user log analysis and cloud infrastructure automation. *Apache NiFi, OpenStack, Ansible, Python*
- Engineered a greenfield customer collection filtering system. Focused on Java backend technologies and scaling a Cassandra database cluster in public and private cloud systems. *Cassandra, JAX-RS, RHEL, Ansible, OpenStack*
- Sustained a mission critical data web API backed by a BerkeleyDB JE key-value store in an enterprise microservice mesh. Increased test coverage for the Java and Scala code bases, automated deployments and production monitoring.

## **U.S. Army CERDEC — Computer Scientist**

JULY 2007 - November 2012

Developed prototype mission control applications for web, mobile, and novel platforms. Built the desktop and sample application software for a novel prototype multi-user, multi-touch tabletop device. Co-authored a paper on [Command and Control in a Multi-touch Environment](#) for the 2008 Army National Science Conference. *.NET, ASP MVC, WPF, Android SDK, SOAP*

## **The Daily Targum Publishing Company — Associate Online Editor**

2007 - 2009

Associate Online Editor for [The Daily Targum](#).

Led web development efforts for special projects requiring custom code outside the scope of the content management system including an award winning special issue for the 2008 US presidential election.

## **EDUCATION**

### **The Johns Hopkins University — M.S. Computer Science**

Specialized in Enterprise and Web Computing

### **Rutgers University — B.S. Computer Science**

Minor in Economics

## **AWARDS**

2017 Above and Beyond the Call of Duty Award at Contrast Security

2012 CERDEC CP&I Team of the Quarter - Tactical Marketplace

2010 CERDEC Employee of the Year award (Team category - COMET Team)

2009 PEO C3T Award of Recognition for dedicated support to the C2 Mobile project

2006 Recipient of AFCEA Dr. Joseph Frank Scholarship Award for students studying Computer Science

2006 Recipient of CompTIA Merit Award given by the CompTIA Education Foundation

## **US DOD Security Clearance**

TS//SCI Poly: 2013-03-27  
INDOC Date: 2013-04-23  
Debrief: 2017-03-03

DJ2-2016-03389