NATHAN KEIR EDEL

resume@natecodes.com

Location: San Mateo, CA

415 nine-three-five zero-zero one-zero (**VOICEMAIL ONLY**)

Summary:

- 25 years of Software Engineering, primarily Java enterprise and back-end cloud applications
- 3.5 years of engineering management experience, leading two internal-facing developer-productivity teams supporting around 500 engineers on Confluence Cloud.
- 25+ years of Linux experience as user, developer, and administrator

WORK EXPERIENCE

Atlassian *2018 —*

Principal Software Engineer, Confluence Cloud Enterprise Compliance *Nov 2023 —*

Technical lead/architect for Confluence's FedRAMP Moderate effort

Senior Engineering Manager, Confluence Cloud Developer Experience *Jan 2020* — Oct 2023

The Developer Experience team was an internal facing team, responsible for all aspects of improving productivity and ensuring quality for around 500 developers working on the Confluence Cloud product.

- Grew team from two engineers to 17 engineers in two teams, one of them indirect.
- Coached and navigated the promotion cycle for multiple engineers.
- Drove projects to modernize the Confluence library/JVM usage, including retiring Jackson 1 and upgrading the JDK used first from 8 to 11, and then 11 to 17.
- Reduced local build-restart time times from 10 minutes to 4 minutes.
- Reduced CI build/test times from over 60 minutes to 20 minutes.
- Improved release frequency from 4 to 9 production releases per week.
- Improved BE release latency from 90 hours to 24 hours.
- Promoted to Senior Engineering Manager in 2023.

Principal Software Engineer, Confluence Cloud *2018 — 2019*

- Designed and led implementation of integration to the internal identity platform, as part of our GDPR efforts, our single highest volume platform integration to date.
- Implemented tools to allow devs to debug the Confluence monolith locally with real staging traffic.

Technologies used: *Java, PostgreSQL, REST, JSON, SQL, Docker, some AWS services, Maven, Gradle*

Zipcar *2016 — 2018*

Software Engineer

Zipcar is car-sharing company; the Bay Area office also created the Local Motion fleet management service. As a subsidiary of Avis Budget Group, Zipcar also provides technology to the larger rental-car business.

- Back-end development, both new microservices and decomposition of the existing monolith.
- Built services to process, store, query and geofence high-volume GPS and vehicle sensor data.
- Built caching and search services used by the web UI and mobile apps.
- Decomposed the activity log/audit trail out of the monolithic application onto its own service.

Technologies used: *Java, Groovy, PostgreSQL, MongoDB, RabbitMQ, REST, JSON, SQL, Cassandra, Docker, some AWS services, Gradle*

Facebook *2014 — 2015*

Software Engineer (E5)

- Back-end and infrastructure development, primarily in Java

Guidewire Software *2006 — 2014*

Senior Software Engineer

Guidewire builds software for the global property/casualty insurance industry.

- Implemented proximity-search/geolocation features; improved performance by 10x across releases.
- Built performance test infrastructure. Worked with application developers on all three core products and platform team to find and fix performance and scalability issues.
- Extensive other infrastructure work to support other DevOps/CI/CD functions.

Technologies used: *Java, Linux, SOAP/REST, Tomcat, Servlets/JSP, Oracle, SQL, Perl, hardware/datacenter*

Panta Systems *2004 — 2005*
Software Engineer
Panta was a hardware startup, building High-Performance Computing clusters.
Technologies used: *C, various scripting, VFS, Linux Kernel, SCSI/SAS, RAID, Infiniband, pxe, NFS*

University of California, Santa Cruz *2002 — 2004*
Graduate Student Researcher (*see "publications" below*)

Kana Software *1999 — 2002*
Software Engineer
Kana was an enterprise software company, building customer service and CRM applications.
Technologies used: *Java, Perl, VB6, Servlets/JSP, Swing, SMTP, XML/DOM, SMTP/MIME/POP/IMAP*

EDUCATION

University of California, Santa Cruz *2011*
M.S. in Computer Science
- Thesis: "*MRAMFS: A Compressing File System for Byte-Addressable NVRAM*"
- Regents Fellowship (2002-2003); Teaching assistant for CMPS115 *Software Methodology*

Dartmouth College, Hanover, NH *1999*
- B.A. in Anthropology. Computer Science Minor.

PUBLICATIONS

Nathan K. Edel, Deepa Tuteja, Ethan L. Miller, and Scott A. Brandt, "MRAMFS: A Compressing File System for Non-Volatile RAM," *Proceedings of the 12th IEEE/ACM International Symposium on Modeling, Analysis, and Simulation of Computer and Telecommunication Systems (MASCOTS 2004)*, Volendam, Netherlands, Oct. 2004

Nathan K. Edel, Ethan L. Miller, Karl S. Brandt, and Scott A. Brandt, "Measuring the Compressibility of Metadata and Small Files for Disk/NVRAM Hybrid Storage Systems," *Proceedings of the 2004 International Symposium on Performance Evaluation of Computer and Telecommunication Systems (SPECTS'04)*, San Jose, CA, Jul. 2004

ACTIVITIES & INTERESTS

- Photography
- Fiction writing

RELEVANT SKILLS

Languages: (*expert*) Java (*through JDK 21)*
(*comfortable)* Groovy, Kotlin, Perl, SQL (*some familiarity*) Python, C, C++, C#, PHP, Lua, x86 assembly

Application/Web Server: Jetty, Tomcat, Apache httpd, php-fpm, nginx

Technologies/APIs: Servlets/JSP/Jersey/Spring, JSON, Protobuf/GRPC, RabbitMQ/SQS/SNS, *some familiarity with other J2EE technologies*

Development Tools: IntelliJ IDEA, gradle, maven, git/BitBucket/GitHub, Jira, gcc/gdb, Gentoo portage

Operating Systems: Linux (*from SLS & kernel 0.99*), Windows

Databases: *developed applications on top of* Oracle, mysql, PostgreSQL (including RDS & Aurora), MongoDB, Cassandra, HBase, and Redis, *including some familiarity with operational aspects of each*

Hardware: extensive familiarity with commodity servers and storage hardware; some exposure to datacenter networking; *familiarity with deploying Amazon EC2*