Brian Zhang

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SUMMARY

Innovative Senior Software Engineer with over 10 years of experience in designing and scaling cloud services and backend systems. Expertise in microservices, API development, and CI/CD pipelines using languages like Java, Python, and Go. Proven track record in optimizing service efficiency and reducing costs while enhancing developer experience. AWS Certified Solutions Architect with a strong background in cloud-native architectures.

PROFESSIONAL EXPERIENCE

Proofpoint   *Dec 2022 - Present*
Senior Software Engineer
Co-led backend services and infrastructure development in a high-volume data environment, ensuring scalability and performance to handle a target of one billion daily events, protecting customers from malicious URLs and emails.
 • Designed and implemented a new data pipeline with lambda pattern by Apache Flink and Spark for real-time streaming and batching process
 • Developed multiple data APIs and managed a data ingestor pipeline with a focus on scalability and performance

Compass Inc   *Mar 2022 - Sep 2022*
Senior Software Engineer
Engineered the Core Listing Data Service as the authoritative source for all listings, ensuring scalable and resilient API functionality.
 • Built a merge service using fuzzy matching algorithms, reducing transaction duplication from 30% to 3% and enhancing data accuracy.
 • Redesigned the service architecture for real-time processing with compressed write operations, yielding $300K in annual cost savings.
 • Provided on-call support for the data pipeline, maintaining fault-tolerant and high-availability operations.

Capital One   *Nov 2016 - Mar 2022*
Principal Associate
Worked in the RetailBank department and experienced a batch of projects, like debt accounts management, market campaign, data migration, payment, etc. Led the backend technical design/development
 • Designed and developed a Payment-API from scratch using Golang, implementing multi-threading and cron batch jobs, increasing deficit collection opportunities by 50%
 • Designed/built workflow ETL batch job solution with AWS StepFunctions + Lambdas + EMR + DynamoDB
 • Led CI/CD automation pipeline design/implementation
 • Drove code review, enhancement, refactoring, and troubleshoot the complex problem
 • Created the shared utility library and boilerplate project to boost the speed of API development
 • Hackathon Winner - Touchless ATM, Payment Mobile application

Goldman Sachs   *Feb 2015 - Nov 2016*
Fullstack Software Engineer
Worked on enterprise data processing platforms, including data acquisition, calculation orchestration, decision making, and process execution.
 • Onboard the Private Wealth Management business line into the Data platform
 • Designed/built the data loading and persisting layer with blueprint Graph API and Titan Graph DB
 • Designed/built the UI with AngularJS. Created the customized directive and component

Infosys   *May 2013 - Jan 2015*
Technology Analyst
Designed/built a B2C Gift Card web application and integrated it with the Apache OFBiz.
 • Developed an Apache OFBiz-based e-commerce platform with UI (HTML, Bootstrap, jQuery, Ajax) and RESTful APIs (CXF).
 • Integrated external APIs with OFBiz services and configured Nginx for reverse proxy and load balancing

Wincor Nixdorf   *Jan 2011 - May 2013*
Java Software Engineer
Worked in the banking solution department that provides a platform to handle all the daily bank business. I was responsible for both UI and backend design and development.
 • Designed/built the UI with the JSF framework which manage the view process
 • Built distributed service with EJB3 including the service and data persistence layer

Infosys   *Jul 2009 - Jan 2011*
Software Engineer
Worked in the BankingCapitalMarket department which provides the IT solution to the Financial company. I was working on a reporting system and a web project for both ZionsBank and ArabicBank.
 • Designed/Built the SOAP web service using the Apache Axis
 • Designed/Built the Java object XML binding using the JiBX and XML parser by JAXP(SAX, DOM)

• Awarded second place in the new employee contest

Warelords Limited   *Dec 2008 - Jul 2009*
Java Full Stack Software Engineer
I was responsible for developing a project management application, like Jira, that can track the status of a project, generate the related report, and manage the project information.
• Designed/built the UI components with javascript and struts framework
• Designed/built the core backend service including the business logic and persistent layer

CERTIFICATION

•   AWS Certified Solution Architect - Associate
•   AWS Certified Solution Architect - Professional

EDUCATION

Liaoning Technical University - Liaoning, China   **2005 - 2009**
Bachelor's Degree of Engineering, Software Engineering
Liaoning Technical University - Liaoning, China   **2007 - 2009**
Bachelor's Degree of Engineering, Business Administration

Github - https://github.com/BrianZhang2018

Ocsf-detection-engine: A graph-based detection engine for cybersecurity events that maps to the Open Cybersecurity Schema Framework

Parenting-llm: A comprehensive AI system that provides evidence-based parenting advice using Retrieval-Augmented Generation (RAG) with internet data integration

ChatBot: A comprehensive local chatbot project with fine-tuning local LLM model and RAG embedding model with Vector DB, designed for business knowledge assistance and support your daily work

MetaVoice: An alternative voice to text tool for superwisper or voiceInk, free

SKILLS

• **Programming Languages**: Java, Golang, Python, JavaScript, Groovy
• **Cloud & DevOps**: AWS, Kubernetes, Helm, Harness, Terraform, Docker, Circle CI, Jenkins2, Nginx, JBoss, Weblogic, Tomcat
• **Frameworks & Libraries**: Guice, GRPC, Thrift, Apache Flink, React, GraphDB, Jersey Restful Service, Grizzly Server, Spring, Swagger UI, AngularJS, Gulp, RequireJs, Bootstrap CSS, Zookeeper, Camunda BPM, CXF Restful Service, JSF, Servlet, EJB, AOP, JAXP, JUnit, Axis, JiBX, iBatis, Hibernate, Struts, jQuery
• **Databases & Data**: RDS MariaDB, PostgreSQL, AWS DynamoDB, Athena, MySQL, DB2, Oracle
• **Monitoring & Misc**: Kafka, Grafana, Prometheus, Datadog, Bazel