

Alexander *Ivanov*

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SUMMARY

- Software engineer (4–5 years) building backend systems, ETL pipelines, and API integrations in Python and Java.
- Currently at Freddie Mac — automating data workflows across ServiceNow, Snowflake, and Elastic with OAuth 2.0 auth and secure credential management.
- Full-stack background in Spring Boot, JavaScript, and TypeScript.

EXPERIENCE

Freddie Mac

JUN 2023 – PRESENT

Software Engineer II

- Built modular ETL pipelines in Python around single-responsibility components for independent testing and reuse.
- Integrated ServiceNow, Snowflake, and Elastic APIs to automate data retrieval workflows that previously required manual effort.
- Implemented OAuth 2.0 authorization flows for secure API authentication across internal and external endpoints.
- Pulled server telemetry from Elastic via API to generate operational reports supporting capacity planning.
- Built automated workflows in ServiceNow with client- and server-side scripting to streamline IT operations.
- Set up email automation system in Python and Linux for server-to-client communications.
- Managed sensitive credentials through HashiCorp Vault and CyberArk, eliminating local credential storage.
- Scheduled automated job execution via AutoSys, orchestrated through ServiceNow on defined intervals.
- Diagnosed and resolved script execution failures using Linux command-line tools during on-call rotations.
- Authored system design documents and architecture diagrams to communicate behavior and data flow before implementation.
- Championed adoption of structural design patterns across the team, raising code quality and establishing shared standards.

PYTHON · SERVICENOW · SNOWFLAKE · ELASTIC · OAUTH 2.0 · HASHICORP VAULT · CYBERARK · AUTOSYS · LINUX

Paradigm Testing

MAY 2021 – JUN 2023

Software Developer (Contract)

- Developed Java Spring MVC web application for a medical examination platform serving candidates and administrators.
- Built exam administration system for candidate monitoring and room assignment management.
- Migrated data access layer from Spring JDBC to Spring JPA, improving codebase maintainability.
- Implemented asynchronous frontend–backend communication using AJAX for continuous data flow.

JAVA · SPRING MVC · SPRING JPA · JAVASCRIPT · AJAX · MYSQL

Synergy BIS

JUN 2020 – OCT 2020

Software Development Intern

- Integrated MongoDB into the company website backend to improve data flow.
- Developed frontend in TypeScript, self-taught to meet project requirements.

MONGODB · TYPESCRIPT

Software Development Intern

- Deployed Breeding API enabling mobile access to plant breeding database.
- Built Android application and presented on the company's live stream.

ANDROID · REST API

SKILLS

LANGUAGES

Python · Java · TypeScript · JavaScript · SQL · HTML/CSS

FRAMEWORKS

Spring Boot · Spring MVC · Spring JPA

DATA

Snowflake · MySQL · MongoDB · Elastic

PLATFORMS

ServiceNow · AutoSys · Linux

SECURITY

OAuth 2.0 · HashiCorp Vault · CyberArk

EDUCATION

University of Maryland, Baltimore County

B.S., Computer Science