

# Alexander *Ivanov*

✉ ivanov.n.alexander@gmail.com    📞 240-242-5597    📍 Sterling, Virginia

## SUMMARY

Software engineer with 4–5 years building backend systems, ETL pipelines, and API integrations in Python and Java. Currently at Freddie Mac, designing automated data workflows across ServiceNow, Snowflake, and Elastic, implementing OAuth 2.0 authentication, and managing secure credential infrastructure. Background in full-stack web development with Spring Boot and JavaScript/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