# Laith Alkhalil Farmington, MN | Alkhalil.Laith@mayo.edu | (507) 601-9646 | Personal Website

#### **SUMMARY**

Software Engineer with 4+ years of experience delivering secure, scalable, and high-performance backend systems in healthcare and logistics. Proven track record in designing and deploying cloud-native microservices on GCP. Adept in the full software development lifecycle, from architecture and API development to CI/CD automation, DevOps, and performance monitoring. Strong technical foundation in Java (Spring Boot/MVC), Python (FastAPI), JavaScript/TypeScript, SQL Server, and Oracle.

Currently advancing AI and machine learning expertise through an **M.S. in Computer Science** at Georgia Tech, with a passion for building innovative, high-impact solutions that scale.

#### **EXPERIENCE**

# Mayo Clinic - IT Analyst Programmer

Jan 2024 – Present

- Designed and deployed <u>DICOM</u>-to-non-<u>DICOM</u> and <u>DICOMWeb-compliant microservices</u> using Python FastAPI, Pydicom, and OpenCV to improve clinical imaging workflows.
- Containerized DICOMWeb-compliant microservices in Docker, and deployed using Azure Pipelines following DevOps best practices.
- Integrated enterprise imaging system (Image Move iMove) with **Azure SSO (OAuth2)** and **Microsoft Graph API**, enhancing authentication and authorization.
- Led and Engineered API management platform migration strategies, by moving the clinical viewer
  backend services of the InfinityView system to ApigeeX platfrom with a backward-compatible
  resolution layer, ensuring zero downtime cutovers and improved credential reliability.
- Implemented AppDynamics and Splunk monitoring for uptime and performance tracking, enabling faster root cause analysis.
- Designed and developed an internal knowledge base web application using HTML, JavaScript, CSS and Nginx to centralize documentation of key processes, workflows, and troubleshooting guides, resulting in a 30% reduction in issue resolution time and improved cross-team collaboration.
- Developed Bash shell scripts in Linux environments to automate workflows and data corrections, eliminating manual intervention and ensuring system accuracy while boosting operational efficiency.
- Actively contributing to Agile/Scrum sprints, collaborating with cross-functional teams and participating in ServiceNow support processes.

- Engineered **Java Spring Boot** REST APIs to integrate with **Google Cloud Storage (GCS)**, enabling enterprise backend migration to **GCP** and achieving \$2M/year in cost savings.
- Secured backend services by implementing Okta token-based authentication to meet enterprise compliance requirements.
- Built high-performance, highly available distributed systems, optimizing Cassandra NoSQL queries to improve response times.
- Designed and implemented image processing APIs leveraging Google Cloud Vision API for automatic detection and blurring of sensitive images, contributing to the successful launch of <u>Picture</u> <u>Proof of Delivery</u> and enhancing enterprise data privacy compliance.
- Served as Scrum Master, leading modernization of legacy systems and mentoring vended/contracted developers to ensure delivery of high-quality, scalable solutions.
- Monitored systems in production and test environments and took appropriate action when necessary.

# FedEx - Customer Technology Consultant

Nov 2019 - Dec 2021

- Delivered technical solutions and led **ERP/WMS/API** integrations using VBA, SQL, across hundreds of customer platforms which resulted in a significant revenue generation to the enterprise.
- Provided white-glove support to developers and third parties integrating FedEx Web Services, from initial development through production launch.
- Acted as technical liaison between business stakeholders and development teams, increasing REST API adoption and reducing integration times.
- Managed a territory in a geographic customer base, consulting on clients on shipping automation
  platforms and enterprise integration strategies across U.S. territories.

### **EDUCATION**

Georgia Institute of Technology	Atlanta, GA
Master of Science, Computer Science (Machine learning & Artificial Intelligence)	In Progress
Metropolitan State University	St. Paul, MN
Bachelor of Science, Computer Science (Cybersecurity Minor)	Aug 2023

## **TECHNICAL SKILLS**

Languages & Frameworks: Java (Spring Boot/MVC), Python (FastAPI), JavaScript/TypeScript, React.js/Next.js, Bash scripting

Cloud & DevOps: Azure, Google Cloud Platform (GCP), Docker, Jenkins, Azure DevOps, CI/CD, Nginx

Data & Databases: SQL Server, Oracle, NoSQL Cassandra, PostgreSQL

Healthcare Standards: DICOM, DICOMWeb, FHIR

**Tools & Monitoring:** AppDynamics, Splunk, Grafana, Git(GitHub enterprise, Gitlab, Azure DevOps-ADO), ServiceNow

APIs & Libraries: Microsoft Graph API, Google Vision API, OpenCV