# Douglas O. Issichopoulos

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# **EXPERIENCE**

Senior Software Engineer, Fortinet — Sunnyvale, CA

08/2024 - Present

 Designed and deployed a containerized, cloud-native data ingestion and monitoring pipeline for high-volume timeseries network performance data on AWS EKS: architected Kafka-based streaming pipelines to reliably ingest and distribute telemetry data to self-hosted TimescaleDB, deployed continuous seasonality-based anomaly detection on this telemetry data, exposed queryable API endpoints via FastAPI, and ensured real-time observability and data quality through Grafana dashboards.

## Software Engineer, Lacework [Acquired by Fortinet] — Mountain View, CA

03/2024 - 07/2024

- Optimized the batch + realtime security threat alerting pipeline for the Lacework Edge product using unsupervised machine learning anomaly detection (Kubernetes microservices architecture built with Java, Go, Python, AWS EKS & DynamoDB, and Snowflake)
- Developed an LLM-based anomaly interpretation system using a Retrieval-Augmented Generation (RAG) methodology

Senior Software Engineer, Humanyze — Palo Alto, CA

07/2018 - 12/2022

- Full stack web development of our <u>Executive Insights</u> solution using React.js, Django, PostgreSQL, and AWS
- In a team of two, developed a new ETL cloud batch-processing pipeline using AWS EMR and S3 with PySpark, achieving a 100x reduction in processing time and \$10k/month cost savings
- Created a cloud benchmarking system to summarize the TBs of timeseries data
- Co-invented the <u>Humanyze Organizational Health Score<sup>TM</sup></u> system, comprised of approximately 20 proprietary metrics (patent pending, U.S. Application Number <u>17/189,919</u>)
- Performed and automated custom analyses for 100+ presentations to our many customers using Python (pandas, scipy, networkx), PostgreSQL, and advanced graph visualization techniques

Previous Employment (not High Tech) — Multiple Locations

02/2012 - 05/2018

## **EDUCATION**

Master of Computer Science, University of Illinois Urbana-Champaign — Remote

01/2023 - 12/2023

- Achieved a 4.0 GPA, focusing on distributed systems and machine learning
- Developed a novel method to reduce inference latency when sharing deep neural network (DNN) tensors between AWS Lambda serverless functions (pdf and blog post)
- Developed a computer vision parking spot detector prototype service with a working frontend, backend, and networking for three cameras on a to-scale model (<u>demo video</u> and <u>blog post</u>)

B.S., Mathematics, Stanford University — Stanford, CA

09/2008 - 12/2012

## **PERSONAL**

Personal software blog: dougissi.com (React)

Receipt Splitter: PartySplit.com (React + TypeScript), perfectly split a bill/receipt/check using AI

Wordle Clone: WordleReplay.com (React), play any published Wordle, 1,000+ daily users

**Book**: <u>Called Higher</u>, a Christian faith testimony published on July 15, 2019

Languages: English (Native), Spanish (Adv.), Portuguese (Adv.), French (Inter.)