EXPERIENCE

► Vareto, Inc.

Senior Software Engineer [05/2021 - Present]

- Project: SOC2 Audit.
 - Setup Drata for infrastructure monitoring in AWS. Worked with VP of Engineering and External Auditors on roadmap for evidence gathering.
 - First successful SOC2 certification enabled Sales to expand beyond Early Founder-Acquainted Customers.
- Project: Creation of customer segmented ETL pipelines.
 - Migrated existing Pandas scripts orchestrated via Bash + Cron with E-mail Alerts → Per-customer Airflow Dynamic DAGs with Slack alerts.
 - Setup Infrastructure for Managed Airflow with Astronomer. Provided technical guidance on using Airflow to Solutions Team.
- Project: Service to Manage Customer Configurations.
 - Configurations influence customer ETL pipeline to in-app experience. JSONs across multiple Repos ightarrow Single source-of-truth for Configs.
 - Created support for configuration history, schema evolution, soft-deletes, and rollbacks using FastAPI, DynamoDB, Node.js and React.
- Project: Customer Sandbox Accounts.
 - Unlocked the ability to create Sandbox Accounts that are cloned from and synced with Live Customer Accounts in Production, enabling Customer Success to go from Experimenting with configuration updates in Prod → Testing updates in Sandboxes before committing to Prod.
 - Quick spin-up of Sandbox Accounts enabled Sales Teams to go from Static Product Demos via Zoom o Customers Using App in Demo Accounts.
- Project: Improve Reliability and Performance of Data Platform.
 - Created incremental extraction capability for Netsuite extraction, reducing run times for large customers from >12hrs. → <30mins.
 - Changed the schema for PostgreSQL tables storing metrics generated from customers' source systems, which led to average 10x improvements in query latency, allowing down-scaling of RDS instances due to reduced CPU and Memory Utilization leading to ▼70% AWS spend.
 - Changed certain RDS access patterns for "lookup information" from scaling $O(n) \to O(1)$, thereby reducing endpoint latency.
- Project: Reorganizing Data Platform Monolith.
 - Data Pipeline and Backend Data Service were tightly-coupled in a Monorepo. Decoupled Pipeline and Service code, restructured common utilities into repo with Python package as deploy artifact, restructured code responsible for extraction from source systems into repo with Docker Image as deploy artifact. This unlocked stricter contracts, distribute ownership, and faster deploy cadence.

► Microsoft Corp.

Software Engineer, OneDrive/SharePoint [07/2019 - 05/2021]

- Project: Zero-Code Analytics with Interana on ODSP Usage and Experimentation Telemetry.
 - Microsoft-proprietary Cosmos BDP ETL pipeline (>8hr. latency) \rightarrow Apache Spark + Azure Databricks pipeline (<5min. latency).
 - Created observability for pipeline latency and telemetry volume using DeltaLake, Synapse Analytics, PowerBI.
 - Created telemetry block-list, malformed data and PII quarantining, and throttling to avoid Interana overage fees.
 - Provided assistance to partner engineering teams on ETL-related questions, and conducted office-hours for end users using Interana.
 - User satisfaction with low latency and end-user experience led to onboarding of telemetry from new M365 products like Microsoft Lists.
- Project: ODSP Commercial Usage Analytics via Microsoft Teams.
 - Created chat-bot using Microsoft Bot Framework in C#, with CosmosDB as backend for storing pre-aggregated views created by ETL pipeline.
 - Chat-bot was used internally by ODSP ELT and Product Teams to understand usage trends of top commercial ODSP tenants.

► Ericsson, Inc.

Software Engineer, Big Data and Analytics [06/2016 - 07/2019]

- Project: Customer Success and Technical Solutions for Ericsson Expert Analytics (EEA) for T-Mobile.
 - Contributed to the successful deployment of EEA, which was the largest EEA deployment in the world at the time.
 - Augmented "out-of-box" capabilities of EEA to fulfill novel customer use-cases by working with RAN experts.
 - Performed Setup, Maintenance, and Upgrade of 20 Node On-Prem Cluster separate from Production Cluster for Customer Success.
- Project: Exploratory Analytics on Call Data Record (CDR) with Apache Spark, ElasticSearch, and Kibana under EEA.
 - Reduced customer's wait times for feature requests from few months → few days by democratizing "development" access and allowing RAN experts to test and design network quality metrics on ~20TB production datasets.
- Unlocked dynamic aggregations and drilldowns on production data, prototype dashboards, and shorten feedback loop with customers. • Project: Nationwide-scoped Network Statistics Reporting for EEA.
- - Limited Legacy Bash Scripts Operating on **~100MB** Call Data Records (CDR) → Daily Scheduled **Apache Spark** Jobs Handling ~40TB CDR.
 - Building visibility and trust for <u>EEA</u> with Customer's Executive Leadership Team.

Intern, Consulting and Systems Integration [01/2016 - 05/2016]

- Project: Video Streaming Analytics Platform PoC for Mobile World Congress 2016.
- Created PoC UI with UI/UX Team in Barcelona.
- Project: Ericsson Cloud Migration Tool.
 - Worked on Node + Express.js backend to manage state of legacy PL/I code migration jobs.

Intern, IP Operating System Engineering [08/2015 - 12/2015]

- Project: Support PCEP (Traffic Engineering Protocol) for Ericsson SSR Routers.
 - Implemented test cases for $\underline{\text{PCEP FSM}}$ in **Python**. Test Coverage boosted $\blacktriangle20\%$.
- Implemented restart and cleanup functionality for Path Computation Client (PCC) in C.
- Achievements: Cisco Certified Network Associate (CCNA) Certification [2015-2018].

SKILLS

Programming Languages: Python, SQL, Bash, Scala, Java, JavaScript, TypeScript, C, C# AWS Services: S3, RDS, DynamoDB, ECS, ECR, CodeArtifact, CloudWatch, CDK

Azure Services: ADLS Gen2, DataFactory v2, Pipelines, Databricks, CosmosDB Databases: PostgreSQL, ElasticSearch, MySQL, HBase, MongoDB

Data Engineering: Apache Spark, Apache Airflow, Pandas Web Development: FastAPI, Django, SQLAlchemy, Node.js, Express.js, React

Developer Tools: Git, GitHub, Docker, LocalStack, DataDog, Figma

EDUCATION











