

SERHAN SARI

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Solutions Architect - Associate

Developer - Associate

DEVELOPER | ENGINEER | DEVOPS | ANALYST | SCRUM MASTER

PROFILE

10+ Years of performance-driven - Software Engineer | Data Engineer | Analyst experience, armed with broad-based skills and expertise. I am determined to implement my earned skills for the rapid growth of the prospective organization by working effectively and consistently.

TECHNICAL SUMMARY

- **Languages:** Python, Node JS, GO, SQL, VBA, UNIX, MATLAB
- **Analytics:** Statistics & Machine learning using neural nets and regression analysis on large data sets
- **Databases:** Postgres, MySql, Sybase, Snowflake, Onelake, NoSQL: MongoDB, DynamoDB
- **Libraries:** Pandas, Numpy, PySpark, Celery, Django, Flask, Selenium, boto3, aws-cdk
- **Caching:** API Gateway Caching, DAX Caching, Redis Cluster
- **AWS:** EC2, Lambda, S3, CloudFormation, Route53, RDS, CloudWatch, AWS SAM
- **Other:** REST API, GraphQL, Splunk, Git, Github, GitLab, BitBucket, Jenkins, Docker, New Relic, Terraform, HTML & CSS, JIRA

PROFESSIONAL EXPERIENCE

Duke Energy | Software Engineer

Jan 2023 - Apr 2023

- Built reminder and snoozed notification email

- Created Kafka Sink and Source connectors for PostgreSQL
- Used splunk to check application logs
- Designed architectural frameworks solutions for SaaS that best suits client web application hosting demands in AWS cloud platform, leveraging AWS services such as S3, Lambda, API Gateway, SQS, SNS
- Develop key application components using Python (Flask) and RESTful architecture.
- Worked with AWS environment (Lambda / RDS / DynamoDB)

Capital One | Software Engineer

Mar 2021 - Jan 2023

- Personal Drive on S3 called userspaces

- Proficient with container systems like Docker and container orchestration with Kubernetes and worked with Terraform.
- Managed Docker orchestration and Docker containerization with Kubernetes
- Designed architectural frameworks solutions for SaaS that best suits client web application hosting demands in AWS cloud platform, leveraging AWS services such as S3, Lambda, API Gateway, SQS, SNS
- Develop key application components using Python (Flask) and RESTful architecture.
- Worked in AWS environment (S3 / EC2 / ECS / Lambda / RDS)
- Developed CLI version of userspaces API
- Performed monitoring and security-related enhancement (New Relic)
- Worked on the CICD pipeline with Jenkins, Git, SonarQube, Eratacode, Checkmarx
- Worked with SQL database (Postgres) and Snowflake
- Used splunk to check application logs
- Integrated New Relic Monitoring into our applications (API, SCAN, PROCESSES)

Progressive | Data Engineer

Jul 2020 - Mar 2021

- Worked with Enterprise Data Pipeline

- Worked in AWS environment (S3 / EC2 / ECS / Lambda / RDS)
- Used PySpark to process batch data pipelines
- Fetched all the snowflake-config- repos in GitHub into a base repo with gitmodules and Automate the CICD pipeline with Jenkins API, Git, and Python
- Worked with Snowflake to clear old entitlements from snowflake via python and pandas

Volkswagen of America | Software Engineer

Feb 2020 - Jul 2020

- Developed Volkswagen's 'reservation platform' for online buying called myVW portal

- Developed web app solutions using a variety of languages, frameworks, and platforms such as NODE JS, SQL, GraphQL, and HTML.
- Created a product report in CSV and sent it to Datalake in sftp format with NODE JS.
- Data Extracting, Validation, and Correction with Python - Pandas
- Worked on the CI/CD pipeline to deploy to AWS EC2 instances
- Worked with RESTful application on AWS Lambda with Python
- Worked with AWS (Lambda, Fargate, CloudWatch, S3 Buckets, API Gateway, etc..)
- Wrote unittest and integration test with pytest and moto

Capital One | Software Engineer

Jan 2018 - Jan 2020

1. Intent Setup Platform Team Member: responsible for developing and deploying new features, legacy application enhancements, and production support under AMP - Acquisition Modernization Program for card

- Created serverless slack slash command application to help Segment Leads see campaign status with NODE JS and deployed to AWS - Lambda
- Created serverless Post-App Disclosures rendering with NODE JS, added SNS topic, and deployed to AWS
- Created serverless data comparison application with Python, added SNS topic, and deployed to AWS
- Created serverless campaign-monitoring application with GO, added SNS topic and deployed to AWS
- Wrote Unit and Integration test with GO, Node, and Python
- Implemented New Relic Performance Monitoring to eApis; brandedOffers, displayContents and SolMapping
- Implemented Cyberark Vault for M1-Cloud and ICatalyst DBs
- Performed AMI and storage type migration on AWS
- Worked on a new platform SPICE UI and legacy platforms ICatalyst and M1-Cloud
- Performed Rehydration for EC2 and ASG
- Helped to solve tickets opened by users (Segment Leads) (Production Support)
- Made necessary changes on CFT and Jenkins files
- Wrote python script to find differences in each table between two different databases
- Wrote python script to update database table from another database table

2. Investing Platform Conversion Team Member: was responsible for developing and validating data transformation processes from Capital One Investing platform to E*TRADE

- Responsible for converting 1.2 million Capital One Investing customers' sensitive information to E*TRADE.
- Developed validation scripts with Python and Pandas for millions of rows of Capital One's data
- Developed a time-saving method utilizing Pandas data frame with Python to find discrepancies in data migration during ETL jobs from the Sybase database.
- Used PySpark for real time processing
- Developed SQL queries to extract data from existing sources and transferred the accounts and related data to E*TRADE.
- Involved in processing the streaming data and batch data using Apache Spark
- Imported information from different sources such as AWS S3, and EC2 and converted them into Spark RDD for analyzing data.
- Developed spark scripts via pyspark by adhering to the client's requirements for ensuring the effective operation

Fannie Mae | Software Engineer

Nov 2016 - Jan 2018

Worked in DevSecOPS Team

- Worked on DevSecOPS Team's DAST(Dynamic Analysis Security Testing Scan), SAST(Static Application Security Testing) scan, SCA(Software Composition Analysis) scan, OPA(Open Policy Agent Docker Image and Scan Policies), Invicti(Web-Security Scan), Zeronorth, SSL scan, Eligible Scan, API Scan, SDElements scan, Compliance Scan, and Container Scan.
- Worked with AWS (Lambda, Fargate, CloudWatch, S3 Buckets, API Gateway, etc..)
- Wrote REST end-points and schemas to perform query scans for various scans
- Worked with AWS (Lambda, Fargate, CloudWatch, S3 Buckets, API Gateway, etc..)
- Used CFT(Cloudformation) to add AWS resources and deploy such as lambda, api gateway, etc..
- Worked on deploying applications to AWS environment with Jenkins and UCD

Ucar (University Corporation of Atmospheric Research) | Software Engineer

Dec 2015 - Nov 2016

Built Ucar's Website with Django and Automation with Python

- Worked with Grafana for analytics and monitoring of database and website
- Worked with RPM Package Manager on a Linux environment to build packages
- Worked with NGinx for web servicing
- Used Django/Python to build UCAR's dashboard

- Assisted with the automation of the UCAR's manual processes by writing Python scripts to speed processes and maximize accuracy

Gate Gourmet | Business Intelligence Administration Analyst / Developer

Oct 2013 - Nov 2015

- Managed \$10+ million/year in the airline's inventory

- Automated Backorder notification application utilizing Python and VBA to notify 500+ hubs in North and South America daily shipment status, resulting in a considerable reduction in man-hours
- Assisted with the automation of the finance department's manual processes by writing Python scripts to speed processes and maximize accuracy
- Data Migration of new inventory and additional item
- Wrote unittest and integration test with pytest and unittest
- Automated the Microsoft Outlook with VBA to send automated emails daily

LC Waikiki | VBA Developer

Jul 2012 - Aug 2013

- Developed a customer registration system for a fashion retail company.

- Create VBA programs to automatically update Excel workbooks, encompassing class & program modules and external data queries.
- Develop GUI interfaces using Open Database Connectivity (ODBC) to connect to Oracle (RDBMS).
- Extensively use Excel functions in development, focusing on read/write integration to databases.

EDUCATION & CERTIFICATION

- **Stratford University** | **Master of Science in Information Systems** | Falls Church, VA | 2013-2015
- **Işık University** | **Bachelor of Engineering in Industrial Engineering** | Istanbul, Turkey | 2007 - 2013
- **SpringBoard** | **Data Science Certification Program** | San Francisco, CA | 2017
- **Işık University** | **Advanced Excel Certification** | Istanbul, Turkey | 2012
- **AWS Certification** | **AWS Developer Associate** | Falls Church, VA | 2018
- **AWS Certification** | **AWS Solution Architect** | Falls Church, VA | 2018
- **SCRUM Alliance** | **Certified SCRUM Master** | Fort Washington, MD | 2023

PROJECTS

SpringBoard | Instacart - Kaggle Competition

- Instacart Future Order Analysis; Predicting the consumer's next purchase order for Instacart. Predicting which item(s) will be in a user's next order by looking at over 3 Million historical purchase orders from more than 200,000 anonymized Instacart users.

- Python | Numpy | Pandas | Matplotlib | Seaborn | Statsmodels | Unix | Jupyter Notebook | Linux | Statistical Analysis | CDF & ECDF Functions | Linear Regression | Bayesian Model | Machine Learning

Stratford University | Stratbook

- Stratbook is a campus social networking website for Stratford University, in the form of online social networks, are second nature for university students and aspiring young professionals today. Stratbook is a free service that allows you to create an online page to connect with Stratford University students and Professors. You can share Personal Information, education-related books, questions/answers, etc..

- JavaScript for front-end | HTML5 and CSS for the static page view | JavaScript library - flex slider | MySQL for database

Işık University | Metaheuristic Algorithm Implementation for Vehicle Routing Problem with TABU SEARCH

- The heuristic and metaheuristic search algorithm brings a solution to the vehicle routing problem faced by delivery and collection vehicles. The optimal solution of a VRP instance is the shortest, quickest, or cheapest set of routes assigned to a group of vehicles that satisfies all customers' demands without contravening any instance-specific constraints.

1. MATLAB for coding | Excel for database | VBA for connecting Excel and MATLAB | ARENA for simulation