

Utku Aysev

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PROFESSIONAL EXPERIENCE

HEPSIBURADA

Data & Software Engineer

Istanbul, Turkey

03/2022-08/2023

- Engineered a microservices architecture on GCP using Java, Spring Boot, PostgreSQL, Kafka, RabbitMQ, Druid, and Superset, improving real-time click-stream data processing efficiency by 30%.
- Supplied live data to systems like recommendations and dashboards, achieving over 99% uptime throughout the year and collaborating with cross-functional teams for strategic decision-making.
- Maintained scalable data pipelines on the cloud processing over 100TB of data daily with Spring Boot, Kafka, Big Query, Druid and Superset ensuring real-time high data quality and integrity.
- Implemented a Python cron job on Google Kubernetes Engine to leverage BigQuery, integrating a Slack alert system for real-time notifications to business analysts, resulting in a 40% reduction in data errors.
- Created an internal web-based tool with Spring Boot, PostgreSQL and Hibernate to streamline data format updates, reducing update time from 3-5 days to thirty minutes, improving efficiency for business analysts.
- Managed over 35,000 requests per second on peak Black Friday by implementing a rigorous testing process, adjusting auto-scaling configurations and Google Cloud VMs, for seamless data streaming.
- Utilized Grafana and Prometheus to monitor system performance, processing statistics for up to 70,000 users per second and enhancing real-time data accuracy.

SEBIT

Software Engineer

Ankara, Turkey

02/2021-03/2022

- Enhanced educational technology solutions for nationwide EdTech products by leveraging microservices architecture with Java, Spring, Docker, and Maven, while utilizing databases like PostgreSQL, Cassandra, Elasticsearch and caching solutions as Redis and Memcached.
- Implemented Kafka to build resilient and scalable event-driven architectures, ensuring efficient communication between systems comprising 5 microservices.
- Conducted comprehensive SQL queries within PostgreSQL and Cassandra on a dataset from over 13 million user records, extracting actionable insights to enhance learning experiences.
- Created dynamic cluster binding in Elasticsearch to improve user accessibility, ensuring seamless access to previous year's messages.

STM

Software Engineer Intern

Ankara, Turkey

09/2019-01/2020

- Developed an internal web portal using Python, Flask, and MongoDB to manage and analyze cyber intelligence data.
- Designed and implemented a graph database with Neo4j, containing thousands of cybersecurity vulnerabilities and entities, utilizing similarity algorithms for enhanced risk assessment.
- Constructed a Named Entity Recognition model with Spacy under tight deadlines, efficiently processing pre-tagged cyber intelligence data from hundreds of articles to extract key information.

EDUCATION

MAHARISHI INTERNATIONAL UNIVERSITY

Fairfield, IA

Master of Science in Computer Science

(In progress via distance education; expected completion 04/2026)

Alumni Portal

2023

- Developed an Alumni Portal with microservices using Spring Boot, Spring Cloud, Hibernate, MySQL, and RabbitMQ, enhancing alumni communication and data management.

Spark Application For Sensor Data

2023

- Configured Spark Streaming to process and store data in HBase based on threshold conditions. Visualized using Python, Jupiter Notebook and Plotly

TOBB UNIVERSITY OF ECONOMICS AND TECHNOLOGY

Ankara, Turkey

Bachelor of Engineering, Major in Computer Science

2015-2020

SKILLS

- Java (Spring Boot), Python (Flask, Spacy), SQL (PostgreSQL)
- Apache Kafka, Apache Spark (Spark Streaming), Hadoop, HDFS, HBase, Hive
- Google Cloud Platform (GCP), Google Kubernetes Engine (GKE), Google Compute Engine, BigQuery, AWS, EC2, S3, RDS, DynamoDB
- SQL, Relational Databases, Database Design, PostgreSQL, Cassandra, Elasticsearch, MongoDB, Redis, Memcached
- Docker, Grafana, Prometheus
- Maven, Git, Jenkins (CI/CD pipelines), Kubernetes
- Real-time Data Processing, Data Validation and Error Handling, Large-scale Distributed Microservices, Highy-Available Systems, Data Structures, Algorithms
- Cross-functional Team Collaboration, Technical Communication
- Named Entity Recognition (NER), Graph Databases (Neo4j)
- Agile, SCRUM, Kanban

ADDITIONAL INFORMATION

- **Certifications:** Specialization in Big Data Technologies by Coursera
- **Career Note:** Completed on-campus studies and currently taking distance education courses to complete a Master's Degree in Computer Science (Available for full-time, W-2 employment).