MARKUS SAIZEW

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EDUCATION

Master of Science Artificial Intelligence, IU International University of Applied Sciences Feb 2022 – Present

Bachelor of Science Business Informatics, IBS IT & Business School Oldenburg

Aug 2018 - Jan 2022

Elected Student Representative

Computer Science Expert Subject Area: Software Development, IHK Oldenburg

Aug 2018 - Jul 2020

SKILLS

Programming Languages Python, (T-)SQL, Go, JavaScript, TypeScript Cloud Platforms Microsoft Azure, Google Cloud Platform (GCP)

Data Technologies Azure & GCP Data Platform, Apache Spark, Hadoop, Databricks,

Apache Kafka, SSIS, Apache Iceberg, Apache Hive

MLOps MLflow, TensorFlow, Keras, Apache Airflow, Docker, Kubernetes

Databases Microsoft SQL Server, BigQuery, MongoDB

Data Visualization Power BI, Looker Studio

Web Technologies Node.js, React, Next.js, Flask, FastAPI

Techniques Data Warehousing (Warehouse & Lake), Machine Learning, System De-

sign, Web Development, Data Mining, Git

Languages German (Native), English (Fluent), Russian (Conversational)

EXPERIENCE

Lead Business Intelligence Strategy & Development

Sep 2024 - Present

Popken Fashion Group

- Developed a machine learning solution to optimize procurement, reducing inefficiencies and improving cost-effectiveness.
- Designed an AI-powered tool for clothing attribute recognition, improving product categorization and searchability by 30%.
- Established an advanced analytics and BI-layer for seamless API data extraction, enabling Reverse ETL without file exports.
- Reengineered raw data extraction, replacing Azure Data Factory with Go microservices.
- Led the migration from Node.js to Go, enhancing scalability, speed, and system stability.
- Led and mentored a team of six engineers and three analysts, improving team productivity and professional growth.

Team Lead Business Intelligence Development

Feb 2024 - Aug 2024

Popken Fashion Group

- Designed and built a scalable cloud-based Lakehouse, processing 2TB of data daily and 600M+ rows, with a metadata-driven approach, enabling automatic pipeline generation.
- Led the on-premise to cloud migration, cutting infrastructure costs by 50% and boosting performance by 70%.
- Built a company-wide reporting infrastructure with Power BI, enhancing Self-Service BI and datadriven decision-making.
- Created an inventory management application, visualizing stock levels and reducing operational overhead.
- Developed a real-time streaming system for logistics order picking and analytics.

Mentored and led junior engineers, improving onboarding and team performance.

Business Intelligence Engineer

Popken Fashion Group

- Managed and maintained an on-premise data warehouse with Microsoft SQL Server clustering.
- Developed 50+ reports in Microsoft Report Builder and designed high-throughput ELT processes using SSIS and C#.
- Built and maintained Analysis Service OLAP cubes, improving reporting efficiency with DeltaMaster.
- Developed an internal monitoring web application for jobs and reports.
- Engineered an RBAC authentication system, enhancing security across 10+ internal web applications.
- Created a custom delta detection system, streamlining ETL operations and reducing data inconsistencies.

Dual Study Student Business Informatics

Aug 2018 - Jan 2022

Jan 2022 - Feb 2024

Popken Fashion Group

- Developed and optimized ETL processes using SSIS and C#.
- Designed and implemented web APIs using .NET Core and Blazor WebAssembly, enhancing performance and usability.

RELEVANT PROJECTS

Cloud-Based Lakehouse: Designed a cloud-native, metadata-driven lakehouse, eliminating manual pipeline creation with an auto-generating Apache Spark framework. Built a cloud-agnostic system integrating with Azure and GCP. Used Spark, Databricks, and Kafka for scalable data ingestion and processing. Enabled full automation and seamless data management through centralized orchestration and metadata-driven administration.

In-House BI Tool: Developed an internal BI platform to monitor and control data processes. Built real-time dashboards tracking ETL pipelines, streaming workflows, and API health, with an automated alert system. Implemented data quality monitoring and a centralized authentication system using Microsoft AD for role-based access control. Developed using React + TypeScript, Node.js, MongoDB, SQLite, and MSSQL Server.

Delta Detection System: Built a custom Delta Detection tool in C# for multi-source data extraction. Developed a REST API supporting CSV, Parquet, REST APIs, and relational databases. Designed a metadata-driven architecture for extraction logic. Achieved change data capture with custom tables, stored procedures, and row-level change detection using flagging and hashing techniques.

PERSONAL PROJECTS

Live Broadcast Application: Developed a real-time broadcast tool using React, WebRTC, and WebSockets in Go. Enabled multi-speaker channels with custom naming, admin controls, and advanced audio management for live events.

Nonprofit Management Software: Built a full-stack web app for nonprofit management using React + TypeScript, Node.js, and MongoDB. Integrated member, task, and event management with multicalendar support and a room booking system. Designed an admin panel for user and content management. Integrated Firebase authentication with Google Organization.