

Ihor K

Expert Big Data & Data Science Engineer with BI & DevOps skills

SUMMARY

- Data Engineer with a Ph.D. degree in Measurement methods, Master of industrial automation - 16+ years experience with data-driven projects - Strong background in statistics, machine learning, AI, and predictive modeling of big data sets. - AWS Certified Data Analytics. AWS Certified Cloud Practitioner. Microsoft Azure services. - Experience in ETL operations and data curation - PostgreSQL, SQL, Microsoft SQL, MySQL, Snowflake - Big Data Fundamentals via PySpark, Google Cloud, AWS. - Python, Scala, C#, C++ - Skills and knowledge to design and build analytics reports, from data preparation to visualization in BI systems.

TECHNICAL SKILLS

Main Technical Skills	AWS big data services (5 yr.), Python, ETL, Azure (3 yr.)
Programming Languages	C#, C++, Python, Scala
Java Frameworks	Apache Spark
Scala Frameworks	Apache Spark, Apache Spark 2
AI & Machine Learning	AWS ML (Amazon Machine learning services), Keras, Machine Learning, OpenCV, TensorFlow, Theano
.NET Platform	Azure (3 yr.), .NET, .NET Core
Python Libraries and Tools	Big Data Fundamentals via PySpark, Deep Learning in Python, Keras, Linear Classifiers in Python, Pandas, PySpark, TensorFlow, Theano
Data Analysis and Visualization Technologies	Apache Airflow, Apache Hive, Apache Oozie 4, Apache Spark, Apache Spark 2, Data Analysis, ETL, Pandas, Superset
Databases & Management Systems / ORM	Apache Hadoop, Apache Hive, Apache Spark, Apache Spark 2, AWS Database, dbt, HDP, Microsoft SQL Server, pgSQL, PostgreSQL, Snowflake, SQL
Cloud Platforms, Services & Computing	AWS, Azure (3 yr.), GCP
Amazon Web Services	AWS big data services (5 yr.), AWS Database, AWS ML (Amazon Machine learning services), AWS Quicksight, AWS Storage
Google Cloud Platform	GCP AI, GCP Big Data services

Message/Queue/Task Brokers	Apache Oozie 4, Kafka
Virtualization, Containers and Orchestration	Kubernetes
BlockChain and Decentralized Software	OpenZeppelin
Third Party Tools / IDEs / SDK / Services	Qt Framework, YARN 3
Other Technical Skills	SPLL

WORK EXPERIENCE

Data Engineer

Apr-2011 To Till now

Project: AWS ELT data pipeline and AWS cloud deployment architecture

(2022-06 – current)

Project Description: Creation of ELT pipelines deployed on AWS to collect data from e-commerce platforms

Responsibilities:

- architecture design of ELT pipeline that gathers data from e-commerce clients into a single data warehouse.
- using DBT for processing customer data and identifying similar attributes.
- setting up Airbyte connections, developing custom Airbyte connectors, deploying AWS architecture, Terraform scripting
- building custom data management tools, creating data flow security solutions

Tools & Technologies: Python, Airbyte, Kubernetes, AWS EC2, CI/CD, OpenVPN server, AWS Lambda, AWS SQS, Fargate, BigQuery, DBT, Airflow, AWS Cloudwatch, REST API, AWS ECR

Project: Batch and Streaming Data Ingest into DataLake

(2021-10 – 2022-05)

Responsibilities:

- Design data processing pipelines for medical/ marketing/ e-commerce applications.
- Data Modelling,
- Database Design,
- Database development,
- using DBT for processing patient data,
- Big data processing using Spark Scala,
- Distributed platform development,
- ETL Data Transformation
- ETL Architecture and ETL Solutions Design



Tools & Technologies: Python, Scala, DB (SQL, PostgreSQL), DBT, Spark, Hadoop, Terraform, Kubernetes, Helm, GitLab CI/CD, AWS, Keycloak, Swagger, AirFlow.

Project: Audience Segmentation

(2018 - 2021)

Building a custom customer data platform for a marketing company. Build an ETL pipeline that allows retrieving the data from multiple sources and storing them in the private data warehouse in Hadoop. Create CloudFormation "infrastructure as a code" description of the pipeline and CI/CD to deploy it into the desired environment. Work with streaming data in Amazon Kinesis. Design sources for BI reports in AWS.

Responsibilities:

- Design and implement batch and event-driven workflows for big data processing
- Automated tests for distributed applications
- Data analysis and visualization
- Develop applications for data ingestion and selection
- Develop a recommendation system
- Built reporting dashboards in QuickSight from Athena sources.

Tools & Technologies: Python, Scala, SQL, Kubernetes, Spark, Hadoop framework, Docker, AWS (Storage, Database, DocumentDB, Athena, Lambda, Glue, API Gateway, Kinesis, QuickSight, CI/CD AWS CloudFormation and CodePipeline), Grafana, Git.

Data scientist and Data/software engineer

(Jan-2011 To 2018)

- data analysis
- applying machine learning algorithms
- image analysis
- image recognition
- neural networks developing and tuning
- Database development
- ETL operations engineering
- Development of backend services for data curation
- Automated tests for CI/CD workflows

Tools & Technologies: C#, Python, Keras, TensorFlow, Theano, OpenCV, Pandas, Microsoft SQL Server, SQL, .NET Framework,

Associate Professor

(09/1999–Present)

Department of industrial automation

Taught courses:

- Database development
- Database management systems
- Object-oriented programming
- Parallel programming
- System programming
- Development .NET applications



EDUCATION AND TRAINING

- Measurement methods and devices Ph.D. Degree, EQF level 8
- Master of industrial automation, EQF level 7

COMMUNICATION SKILLS

- Communication skills both oral and written gained as a university professor and R&D projects participant
- Presentation skills gained as a scientific conference speaker

COURSES & CERTIFICATES:

- AWS Certified Data Analytics
- HDP Overview: Apache Hadoop Essentials (SPLL)
- Feature Engineering with PySpark
- Big Data Fundamentals via PySpark
- Deep Learning in Python
- Intermediate Python for Data Science
- Linear Classifiers in Python
- Machine Learning with the Experts
- Python Data Science Toolbox

