# ALEXANDER CZECH

# DATA SCIENTIST

# CONTACT

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- Vienna, Austria

## SKILLS

- Python
- Apache Spark/Airflow
- AWS/EMR/EC2/S3/Athena
- Jupyter/git
- Pandas/numpy/keras/scikit-learn
- nltk/happytransformer/gensim
- shell/R/Java/Scala/C++
- SQL/PostgreSQL/PostGIS
- ESRI ArcGIS/SERVER
- QGIS/SAGA GIS/ENVI

# LANGUAGES

German | Fluent (C2) English | Fluent (C2)

## **INTERESTS**

Krav Maga, archery, board games, skiing, reddit, diving, solo travel, technology, minesweeper, geopolitics, cinema, cooking, baking, geocaching

### **EXPERIENCE**

#### Senior Data Scientist

DataScience Service GmbH | Vienna | 03/2020 - present

- Data mining from unstructured data with ML/NLP methods
- Data engineering and ETL Pipelining for unstructured data
- ML modeling, classification and analysis tasks
- Data architecture and Data Modeling for spatial data, text data, and data mined information
- Extraction, analysis and web mapping of spatial data
- Planing, coordination and execution of research projects with external partners

#### Research Scientist

Vienna University of Technology | Vienna | 01/2016 - 02/2020

- Developed Apache Spark analysis pipelines for data mining crawling data
- Employed **Spark** and **GraphFrames** for Webgraph analysis
- Document embeddings for information retrieval and similarity tasks
- Cluster orchestration on cloud infrastructure (AWS) with EMR and Flintrock
- Teaching classes in GIS, spatial analytics, statistics and python programming
- Developed and maintained a tool for automated student homework evaluation in
  Python and Pandas

#### **Technical Support Engineer**

Deiser Compact Computing | Vienna | 06/2012 - 09/2015

- First and second level IT-Support for client companies
- Developed and maintained an in-house ticketing system in **Python** and **Bottle**

## **EDUCATION**

#### PhD (ongoing), Data Science (Faculty for Spatial Planning)

Vienna University of Technology | Vienna | since 2016

Urban system centrality, data mining, graph analysis, and NLP

#### Master of Science, Geoinformation Science

University of Vienna | Vienna | 2015 | with distinction

• Information retrieval, data mining, programming location-based services

#### Bachelor of Science, Geography

University of Hamburg | Hamburg | 2011

• Emphasis on statistics, GIS and geoscientific programming