

Alexandre Manai

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INFORMATIONS

Date of Birth: **27.03.1998**
Citizenship: **French and German**
Address: **Winterthur, Zürich**
GitHub: **alexandremanai**
LinkedIn: **alexandremanai**
Date of Availability: **as soon as possible**

SKILLS

PROGRAMMING

Languages:

Python • Java • SQL • Bash

OS:

MacOS • Linux • Windows

Methodologies:

Agile • Data - / Event Driven

Software:

Jupyter Notebook • Kafka

Gitlab/Github (CI/CD) • Docker

Kubernetes • Airflow • DVC

MLFLOW • Amazon Web Services

Databases:

MongoDB • PostgreSQL • DynamoDB

Libraries:

NumPy • Pandas • Scikit-learn

Matplotlib • PyTorch

COURSEWORK

UNDERGRADUATE

ETH Zürich:

Linear Algebra

Discrete Mathematics

Algorithms and Probability - **5/6**

Analysis I / II

Systems Prog. and Computer Arch.

Formal Methods and Functional Prog.

Data Modelling and Databases - **5.25/6**

Computer Networks

Probability and Statistics

Visual Computing

Introduction to Machine Learning

ZHAW:

Höhere Mathematik für Informatiker I/II - **5.5/6**

Machine Learning and Data Mining - **6/6**

Höhere Analysis und Numerik - **5.5/6**

Artificial Intelligence I - **6/6**

Information Engineering I/II - **5/6**

LANGUAGES

Native:

French • German

Proficient:

English

EXPERIENCE

SYNTHETICUS AG | DATA - / MACHINE LEARNING ENGINEER

Sep 2022 – Aug 2023 | Zürich, Switzerland

- Generating tabular **Synthetic Data** with State-of-the-art **Generative AI** models (GANs, Transformers, ...) implemented in an **Agile** Software Development Cycle
- Proposed and Implemented a **ML Pipeline** using **Apache Airflow** and **DVC**
- Contributed to the **DevOps** Development with **Github Actions** and **Terraform**

ZHAW | TEACHING ASSISTANT

Jan 2022 – Sep 2022 | Zürich, Switzerland

- Assisting in **Machine Learning and Data Mining** Course lead by Dr. Wehrli
- Bringing my **Expertise in Machine Learning** to Students
- Responsible for **answering all Questions** and **grading the labs**

SYNORYS TECHNOLOGIES | BIG DATA ENGINEERING CONSULTANT

Jul 2020 – Sep 2022 | Paris, France

- Proposed and Implemented a **Data Quality Pipeline** which betters **Quality Throughput** greatly in an **Agile Methodology**
- Working on a **Data Consistency** Task to unify all Datasets over multiple environments using **Dataiku Data Science Studio**
- Working with technologies such as **Talend**, **Dataiku DSS**, **NoSQL DataBase MongoDB**, **DevOps (GitLab CI/CD)**, **Kafka**, **Docker** and **Kubernetes**

PROJECTS

SELF-DEVELOPMENT | PERSONAL

Apr 2023 - now | Data-/Machine Learning Engineer | Winterthur, Switzerland

- Idea: **Collecting User data** through **Slack Surveys** and exposing **Insights** discovered through **Analysis** and **ML** in a **Dashboard**
- Back-end: **Amazon Web Services**, **AWS Cognito**, **AWS Lambda**, **AWS DynamoDB**, **AWS AppSync**, **GraphQL**, **Code Pipeline**, **Slack Application**

RESEARCH BACHELOR THESIS | UNIVERSITY

Jan 2022 - Sep 2022 | Prof. Dr. Stadelmann | Winterthur, Switzerland

- Subject: **Optimizing Neural Networks with Composite Pruning Strategies**
- Grade: **6/6**

RESEARCH PROJECT | STUDENT RESEARCHER

Jul 2021 – Dec 2021 | Prof. Dr. Cieliebak | Winterthur, Switzerland

- Enhanced their **SpeechToText Engine Interscriber** with an **Evaluation Pipeline** evaluating models on **Punctuation** and **Disfluency**.
- Actively conducting **Research (Reading papers, Implementing papers, Testing models, Communicating our Research Findings and Integration in Real-Life Products)** on **State of the Art Language Models**

EDUCATION

ZHAW ZURICH UNIVERSITY OF APPLIED SCIENCES

BACHELOR OF SCIENCE IN COMPUTER SCIENCE

Sep 2020 - Sep 2022 | Average 5.2/6 | Winterthur, Switzerland

ETH ZÜRICH

BACHELOR OF SCIENCE IN COMPUTER SCIENCE

May 2016 - June 2020 | Zürich, Switzerland