

Alexandre Manai

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INFORMATIONS

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

SKILLS

PROGRAMMING

Languages:
Python • Java • SQL • Bash
OS:
MacOS • Linux • Windows
Text Editors:
VSCode • Vim
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

EDUCATION

ZHAW ZÜRICH 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

EXPERIENCE

SYNTHETICUS AG | MACHINE LEARNING ENGINEER

Sep 2022 – Aug 2023 | Zürich, Switzerland

- Generating tabular **Synthetic Data** with State-of-the-art **Generative AI** models (GANs, Gaussian Copulas, Transformers, ...)
- 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
- 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**, **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**