

MAXIME WOLF

maxime.wolf@student-cs.fr | +33 6 02 65 25 04 | linkedin.com/in/maxime-wolf | github.com/maxime7770

EDUCATION

CENTRALESUPELEC, PARIS SACLAY UNIVERSITY

Gif-sur-Yvette, France

BSc in Engineering, MEng in Applied Mathematics

2020-Present

- CentraleSupélec is a top-2 French Engineering School, member of France's Grandes Écoles, based on a highly selective admission process. **GPA: 4.19/4.33 (top-5% of the class)**
- Relevant courses: Statistics and Learning, Advanced Probability, Machine Learning, Algorithmics and Complexity, Statistics and Data in Finance, Partial Differential Equations, Linear Algebra, Signal Processing, Optimization

LYCÉE HENRI POINCARÉ

Nancy, France

Mathematics, Physics, Computer Science

2018-2020

- Preparation studies for highly selective entrance exams to Grandes Écoles. **GPA: 3.93/4.00**

TECHNICAL SKILLS

- Python (pandas, scikit-learn, spaCy, Tensorflow, Keras, PyTorch, Transformers), SQL (MySQL), Matlab, R

EXPERIENCE

AAICO

Venture focused on automating human processes within the insurance and healthcare sectors

Dubai, UAE

Machine Learning and NLP Engineer Intern, supervised by **Gregory Renard**

Fall 2022

- Worked on a drug safety project with an NLP and Graph Neural Networks focus, from data collection to deployment; extracted adverse effects of drugs from medical documents using zero-shot NER and RE models
- In charge of the creation of the AI pipeline for a malicious bots detection project on social media; analyzed current research on the topic; used Twitter API and graph-based models to characterize bot behaviors on trending topics

PARIS DIGITAL LAB

Paris, France

Six-month high-tech track where trainees develop 3 prototypes for real-world businesses

Spring 2021

Data Scientist

- Developed an iOS application for the start-up **OO Orion** to help visually impaired people to detect objects and recognize patterns and colors; applied YOLOv5 model for object detection; achieved real-time and 90% accurate predictions; prototype now sold by the company
- Detected key events in the life of customers from phone calls for a French insurance company (**MACIF**) using Speech-to-Text and CamemBERT transformer model for entity and relationship extraction; reached 92% F1-score on real data; product now used by insurance advisors
- Built a platform to monitor lawn growth for the firm **idverde**, Europe's leading provider of grounds maintenance and landscape creation services; applied XGBoost based on weather API and data collected by IoT objects; cut workers' interventions by approximately 30%

ACADEMIC PROJECTS

Gif-sur-Yvette, France

Kaggle competition as part of the Machine Learning elective

Spring 2022

- Classified geographical areas of interest represented as 300k+ rows of tabular data; designed 100+ new features with feature engineering methods; reached 72% F1-score with an XGBoost model; **ranked 1st** among more than 250 students of CentraleSupélec

Research project on quantum computing, supervised by **Zeno Toffano**

2020-2021

- Explored quantum computing tools and applied Matrix Product State algorithms to simulate quantum circuits on classical computers; contributed to a 75-page handbook on quantum computing for future students based on my research; performed tensor-train decomposition for neural networks as part of the forecast of financial options for a French bank (**Crédit Agricole**); improved the accuracy with 90% fewer parameters

Member and trainer in Automatants, AI association of CentraleSupélec

2020-2021

- Conducted a group of 4 students for a Natural Language Processing project that aimed at exploring various tools and algorithms to summarize texts (NLTK, LSTM, GRU, Transformers)
- Developed a web interface to recognize handwritten words in real-time

ADDITIONAL INFORMATION

- Certifications: Machine Learning Course provided by Stanford University; Deep Learning Specialization provided by DeepLearning.AI via Coursera
- Languages: French (native), English (full professional proficiency), German (intermediate)
- Music: piano (12 years), numerous auditions and concerts

