# Alexis Biver biver.alexis@proton.me

Metz, Grand Est, France

Machine Learning Engineer with 6 years of experience in Deep Learning and Data Science. I have innovated in domains such as Robotics, Voice Assistants and Data, from Proof of Concept to Deployment. Curious and eager to learn, I love to apply the latest techniques to develop new solutions for any domain.

#### CORE SKILLS

- Tools & Deployment: Python, PyTorch, Scikit-learn, Docker, CI/CD, FASTApi, ONNX, C++, SQL, ROS
- Machine Learning: NLP, Time Series Forecasting, Edge-device Optimization, Diffusion Models
- Data: Data Analysis, ETL, Feature Engineering, Data Visualization (Matplotlib, PowerBI)
- Languages: French (Native), English (Professional Working Proficiency)

#### PROFESSIONAL EXPERIENCE

## Machine Learning Engineer

Nancy, Grand Est, France

Inria, Team Larsen/HuCeBot Jan 2023 – Dec 2024 (2 years)

- Developed an open-source Python library for trajectory prediction in robotics
- Performed benchmarks and implementations of the State Of The Art solutions.
- Preprocessed and analyzed multimodal sensor data (LIDAR, IMU, Cameras).
- Supervised an internship leading to a software allowing simple controls of a humanoid robot by voice

#### Teaching Associate

IUT Nancy-Charlemagne

Nancy, Grand Est, France

March 2024 – June 2024 (1 semester)

- Delivered lectures and practical sessions on "Introduction to Network Services" for first-year IT students.
- Conducted Java-based exercises and evaluations to assess students' understanding.

## Machine Learning Engineer

Vivoka, R&D

Metz. France

Sept 2019 – Jan 2023 (3 years, 4 months)

- Designed and optimized ML models for edge devices using PyTorch and ONNX, with Python and C++.
- Developed Python APIs to serve ML solutions and ensured production readiness with Docker.
- Conducted research, benchmarking, and technical popularization of scientific advancements.
- Enhanced data collection and processing to train robust NLP models for voice assistants.

## Data Analyst Developer (Internship)

Luxembourg

PwC Luxembourg, Data Services March 2019 – Aug 2019 (6 months)

- Executed reporting and data visualization using ETL tools and Power BI.
- Updated data-mining solutions in C# and SQL to improve data quality and efficiency.
- Researched and implemented a natural language understanding (NLU) approach for data augmentation.

#### **EDUCATION**

## Master's in Natural Language Processing

Institut des sciences du Digital, Management et Cognition (IDMC)

2017-2019

## Bachelor's in Mathematics and Computer Science

Université de Lorraine 2014-2017