# **Lucas Duport**

Paris, France

**9** lucasduport.cc

Seeking a 6-month internship starting February/March 2026 in MLOps, Machine Learning, or Computer Vision. Passionate about solving complex technical challenges and eager to contribute to innovative, impactful projects worldwide.

# **Projects**

WhatsUpDoc 😯 6

Python, FastAPI, React

- Finalist in Google Healthcare Hackathon against 180 competitors.
- Developed a conversational AI avatar assistant to guide patients through the pre-diagnosis prior to medical appointments.
- Fine-tuned MedGemma-4B on a cardiology dataset, achieving a 2x improvement in diagnostic task performance.

#### Ship Classification (7)

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Python, TensorFlow/Keras

- Built a CNN to classify 13 ship types from 32×32 images under a **30-layer** limit.
- Boosted accuracy with progressive training and balanced augmentation across phases while preventing overfitting through early stopping and LR scheduling.
- Designed an **efficient and reproducible** input pipeline with batching, prefetching.

## Distributed IoT Ring Health Analytics System 🗘

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Scala, Kafka, Spark, MinIO, Docker

- Developed a distributed pipeline simulating a smart ring to stream sensor data and manage messaging with Kafka.
- Analyzed ingested signals stored in MinIO using Apache Spark providing health insights.
- Built an alert microservice to analyze data continuously and **trigger notifications** for alerts.

# Work experience

**Teaching Assistant** Ref: Valentin SEUX, Associate Director – valentin.seux@epita.fr Paris, France **EPITA** 2023 - Present

- Part of a team of 70 students **supporting 800+ third-year students** in coding activities alongside my studies.
- Designed a practical exercise for students with robust test suite deployed as an automated grading system.
- Crash-tested multiple projects and their test suites, providing constructive feedback.
- Assisted students with **debugging and answered technical questions** across various programming languages.
- Attended training regarding pedagogic approach, posture, motivation, voice, and body language.

Ref: Philippe VIALLETELLE, Data Science - philippe.vialletelle@st.com 📙 Letter **STMicroelectronics** 09/2024 - 01/2025

- Created a full-stack platform using FastAPI for data validation and annotation, collecting hundreds of reports.
- Conceived a data augmentation pipeline using RAG for technical text summarization.
- Developed a root cause suggestion system based on reported symptoms in collaboration with end-users; the proof-of-concept was validated with stakeholders and is currently being piloted in 4 factories.

#### Education

AI/ML Intern

#### EPITA - Master's Degree in Computer Engineering

Paris, France

Grenoble, France

Major: Artificial Intelligence & Computer Vision | GPA: 3.7 | Member of student association

2021 - 2026

San Francisco State University - Computer Science

San Francisco, USA

Exchange Semester | GPA: 3.9 | EPITA Student Ambassador

2023

### **✗** Skills & Interests

Hackathons: Google Healthcare - Finalist, Mistral AI MCP - People's Choice Winner.

**Technical Skills**: Python (PyTorch, TensorFlow), C, C++, CUDA, C#, Java, SQL, JavaScript, Shell, Scala.

Tools: Git, Docker, Nix, Linux.

Languages: French (native), English (C1, 970/990 TOEIC), Italian (B2).

**Interests**: homelab, skiing, watchmaking, poker, travel.