# **CHADY DIMACHKIE**

Machine Learning Engineer (open to relocating or remote work)

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StackOverflow: cpcdoy

### **EXPERIENCE**

### Machine Learning Engineer

### **Ubisoft Entertainment**

## 2019 - Current

Paris, France

- Work on a fast and accurate semantic similarity engine using a state-of-the-art multilingual DistilBERT-based model and ANNG search in Python and Rust
- Open-sourced my Rust implementation of our NLP model for real-time inference and was a major contributor of v0.3.0 of the sentence-transformers library
- Deployed our microservice architecture in production using Kubernetes and a complete stack of tools for benchmarking, testing, monitoring, logging and reporting
- Prototype work on a fast high-quality face swap algorithm

### Deep Learning Intern

### **Nvidia Corporation**

**2018 - 2019** 

SF Bay Area, US

- Work on DLSS (Deep Learning Super Sampling), one of Nvidia Turing's major feature for real-time anti-aliasing and upscaling on latest AAA video games
- Work on other projects like style transfer for portraits with autoencoders, etc
- Participated in conferences like GDC, GTC and SIGGRAPH

## Software Engineer Intern

#### ETIX Labs R&D

**2016** 

**♀** Luxembourg, Luxembourg

• Development of a smart CCTV system for data-center monitoring

# Software Engineer Intern

Robert BOSCH GmbH 2015

Saint-Ouen, France

• Development of a web-based product trading platform for internal use

### **PROJECTS**

### Sentence BERT, with Rust

- Implements Efficient Rust implementation of the Sentence BERT NLP model for real-time inference
- Real-Time Path Tracer, with CUDA/OpenGL in C++
- Leverages CUDA/OpenGL interop with support for BRDF with roughness, volume raymarching, texturing, normal maps, triangle meshes, etc
- ArtFlow, a Google's Tilt Brush-like, web-based
- ArtFlow is a VR 3D software, in which you can draw your own world using VR controllers
- Real-Time rendering Engine, with OpenGL/GLSL in C++
- Features microfacet-based lighting models like Cook-Torrance and Oren-Nayar for Physically Based Rendering, Spherical Harmonics lighting, asynchronous texture streaming, shadow mapping, SSAO, adaptive LOD tessellation, etc

### **EDUCATION**

## M.Sc. in Computer Science

#### **EPITA**

**2013 - 2018** 

Paris, France

# B.Sc. in Computer Science

# Bahçeşehir Üniversitesi

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### **SKILLS**

### Industry Knowledge

Machine Learning Neural Networks

Computer Vision NLP

Computer Graphics Rendering

Deployment

### **Operating Systems**

Windows Linux

### **Programming Languages**

Python Rust C++ C GLSL CUDA

[JavaScript]

### **APIs**

 Numpy
 PyTorch
 Keras
 OpenGL

### **Tools**

Kubernetes Docker Visual Studio Vim Jupyter Notebook

## **INTERESTS**

Music Cinema Sports Video games
Travel

## **LANGUAGES**

French

English

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## Spanish

