Loïs Bilat

05.09.1997 Swiss

@ lois@bilat.xyz

4 +41 78 645 94 84

♀ 1807 Blonay - Switzerland

% bilat.xyz

in lois-bilat

billotais

EDUCATION

Master of Science in Computer Science

EPFL

2018 - ongoing

Lausanne. Switzerland

• Specialization : Data Analytics

• GPA first year : 5.71 / 6.0

Bachelor of Science in Computer Science

EPFL

2015 - 2018

• Optional Track: Visual Computing

• GPA: 5.47 / 6.0

• Study exchange at Linköping Universitet, Sweden. 2017 – 2018, GPA: 5.97 / 6.0

Maturité Gymnasiale

Gymnase de Burier

2012 - 2015

• Specific Option: Physics and application of Mathematics

• Complementary Option : Computer Science

• Excellence award in Physics

• GPA: 5.32 / 6.0

EXPERIENCE

Student Assistant

EPFL

♀ Lausanne

 Student assistant for a computer science course given to mathematics and physics bachelor students (ICC - Information, Calcul et Communication)

• Helping them with C++ assignement and various theoretical exercices

PowerPoint creation

EPFL

m 2019 - ongoing

Lausanne

- Creation of PowerPoint presentations that are used in online video classes (MOOCs)
- Transcription from handwritten slides to a coherent and engaging PowerPoint presentation

Summer Job in an Architectural Firm

ABA Partenaires SA

2018

♀ Lausanne

- Modification and correction of blueprints
- Processing replies to requests for tender

Web development

% yvesbilat.ch

∰ 2016

• Creation of a website for an entrepreneur using WordPress

Private Tutoring

Mathematics

2015 - 2017, 2019

• Tutoring for Students in their 9th, 10th school years (14-15 years old)

LANGUAGES

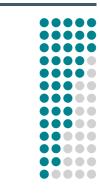
French - Mother Tongue

English - B2

German - B2

PROGRAMMING LANGUAGES

Python
Java
Scala
C/C++
SQL
PHP
HTML
CSS
LaTeX
OpenGL
Assembly
VHDL
Javascript



• • • • •

SKILLS

Topics

Machine Learning Deep Learning

Data Analysis Natural Language Processing

Computer Vision Artificial Intelligence

Libraries

Numpy Pandas Keras Spark Scikit-learn
OpenCV nltk
Matplotlib

Applications and Tools

VS Code Git Jupyter Notebooks Anaconda Intellij IDEA Android Studio Wordpress

Operating Systems

Linux (Archlinux, Ubuntu) Windows 10

PROGRAMMING PROJECTS Denoising with Generative Models **Semester Project** ## 2019 - ongoing **♀** EPFL - VITA Lab Generative adversarial networks have often been used for image processing (for instance denoising and super-resolution). However, those techniques are less common in audio applications. The goal of this project is to first evaluate state-of-the-art techniques for audio denoising and audio super-resolution, and then to try to apply some of the Generative methods used in image processing to audio processing. (Python) (PyTorch Detecting Bias in Amazon reviews % Course Project **♀** EPFL **2018** A Data Story about the potential bias that can be found in Amazon user reviews, and how to correct it. We worked on 20GB of comments extracted from various Amazon articles, and used multiple tools including Pandas, pyspark, and matplotlib. Python Pandas Matplotlib Jupyter notebook The Quest for The Holy Grail % Course Project ₩ 2018 **♀** LiU Creation of a 3D maze game with different objectives, world physics, lightning effects, drawing optimisation. user interface and sound effects. (C) (OpenGL) Tankode Junction Hackathon **2017** Creation of an educative video game where the behavior of a Tank had to be programmed by the user. This game was programmed in less than 48 hours using Android Studio, in a team of 4 people. I had the opportunity to learn how to work efficiently in a team by splitting the work in an optimal way. [Java] Android Studio 3D game - Tangible user interaction **Course Project** ₩ 2017 **♀** EPFL Creation of a dexterity 3D game where the environnement had to be controlled by moving a LEGO board in front of a camera. It implemented some image processing and recognition and was done using *Processing*. Java XBlast **Course Project ♀** EPFL ₩ 2016 Creation of a multiplayer video game based on the game Bomberman. It could be played by up to 4 player on different computers. Java

Calcul Mental

% Android Application

2015

Creation of an Android app that people can use to do some small calculations (additions, substractions, multiplications and divisions). Different modes, such as a test mode, a timed mode and a rush mode are available. [Java] (Android Studio)

La Pipopipette

% Travail de Maturité

2014 Q Gymnase de Burier

Creation of a multiplayer video game for iOS based on the game Dots and Boxes. An artificial Intelligence was implemented. Objective-C Xcode