Loïs Bilat

05.09.1997
Swiss

@ lois@bilat.xyz   📞 +41 78 652 29 56   📍 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   📍 Lausanne, Switzerland

- 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   📍 La Tour-de-Peilz, Switzerland

- Specific Option : Physics and application of Mathematics
- Complementary Option : Computer Science
- Excellence award in Physics
- GPA : 5.32 / 6.0

EXPERIENCE

Student Assistant
EPFL

📅 2019 - ongoing   📍 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

📅 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   Artificial Intelligence   Reinforcement Learning   Natural Language Processing   Computer Vision

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

📅 2018   📍 EPFL

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   📍 Helsinki, Finland

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 controled 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

📅 2016   📍 EPFL

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   📍 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`