Loïs Bilat

Education

2018–2020 Master in Computer Science, EPFL, Lausanne.

 ${\sf Specialization}: \ {\sf Data} \ {\sf Analytics}.$

Interim GPA: 5.65 / 6.0

2017–2018 Study Exchange, LiU, Linköping.

10 months study exchange during the third Bachelor year.

2015–2018 Bachelor in Computer Science, *EPFL*, Lausanne.

Optional Track: Visual Computing.

 $GPA: 5.47 \ / \ 6.0$

2012–2015 Maturité Gymnasiale, Gymnase de Burier, La Tour-de-Peilz.

Specific Option: Physics and application of Mathematics.

Complementary Option: Computer Science.

Excellence award in Physics

2009–2012 Certificat d'études secondaires, Collège des Mousquetaires, La Tour-de-Peilz.

Specific Option: Mathematics and Physics.

Experience

2018 Summer Internship in an Architectural Firm, ABA Partenaires SA, Lausanne.

Modification and correction of blueprints.

Processing replies to requests for tender.

2016 Web development.

Creation of a website for an entrepeneur using WordPress: yvesbilat.ch

2015-2017 **Private Tutor**.

Mathematics tutoring for Students in 9th and 10th year

Languages

French Fluent Level Native Language

English Buisness Level B2 Level

German Conversational Level B2 Level

Skills

 $Languages \quad Python \ (Numpy, \ Pandas, \ Matplotlib, \ Scikit-learn, \ Keras), \ Java, \ C/C++, \ Scala,$

OpenGL, MySQL, LaTeX, Assembly, VHDL, PHP, HTML, CSS

Operating Linux (Ubuntu, Archlinux), Windows 10

Systems

Applications Visual Studio Code, Eclipse, Intellij IDEA, Android Studio, Wordpress

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Domains Data Analysis, Machine Learning, Natural Language Processing, Artificial Intelligence, Conception of Algorithms, Software Engineering, Database Systems, Operating Systems, Computer Architecture

Programming Projects

2018 **Detecting Bias in Amazon reviews**, *EPFL*, Python.

A Data Story about the potential bias that can be found in Amazon user reviews, and how to correct it. Various tools including Pandas, pyspark, and matplotlib were used.

2018 The Quest for The Holy Grail, LiU, C and OpenGL.

Creation of a 3D maze game with different objectives, world physics, lightning effects, drawing optimisation. user interface and sound effects.

2018 Part-of-Speech Tagger and Dependency Parser, LiU, Python.

Implementation of a Part-of-speech tagger using a multi-class perceptron classifier (with an accuracy of more than 93%) and a sentence dependency parser (with an accuracy of more than 76%).

2017 Tankode, Hackathon, Java.

Creation of an educative video game where the behavior of a Tank had to be programmed by the user. This game was programmed for Android during the *Junction Hackathon* in Helsinki.

2017 **3D game - Tangible user interaction**, *EPFL*, Java.

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*.

2016 XBlast, EPFL, Java.

Creation of a multiplayer video game based on the game *Bomberman*. It could be played by up to 4 player on different computers.

2014 La Pipopipette, Travail de Maturité - Gymnase de Burier, Objective-C.

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