Fachhochschule Luzern HSLU

Studiengang Digital Ideation, Bachelor
4. Semester

TBD

Simon Hischier

April 16, 2018

Inhalt

1 Abstract

2 AI, Machinelearning, Deeplearning

blibla [1]

3 TensorFlow.js

As of April 2018 Google released a new JavaScript Machine Learning (ML) library called Tensorflow.js. Tensorflow.js is build on deeplearn.js and can be used for a broad variety of ML tasks. The library allows to train and run models in the webbrowser. Models can be pre-trained on a server or offline computer and then be used on the website.

4 Goal

The goal of this work is to generate maps for games. Maps from "Super Mario" or "Super Meat Boy" contain mostly solid or empty blocks. With that knowledge, the levels can probably be represented in an easy to read text format instead of an image format. The text can probably be feed into an ML system and new maps can be generated with the assistance of a ML model.

We can Cite [2], [3], [4], [5], [6], [2] etc. If we want to have terms and shortcuts we can introduce them once: Long Glossary Entry and Open Source Software (OSS). If we refer to Long Glossary Entry and OSS later it will only use the short version.

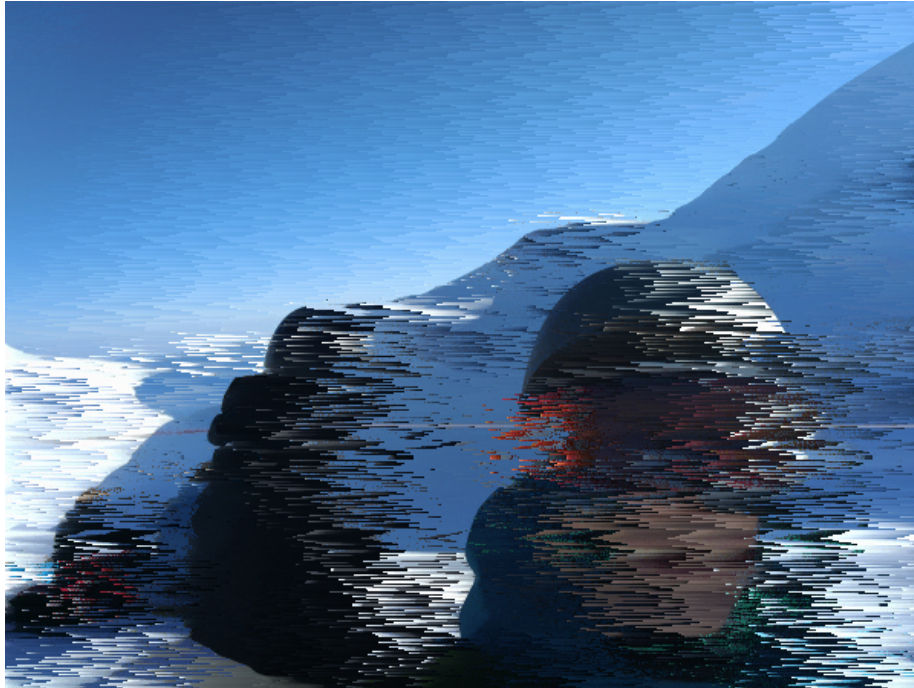# 5 Examples

6 Examples of Images

Images are possible aswell:

Figure 1: Thats me. Source: https://thecell.eu/

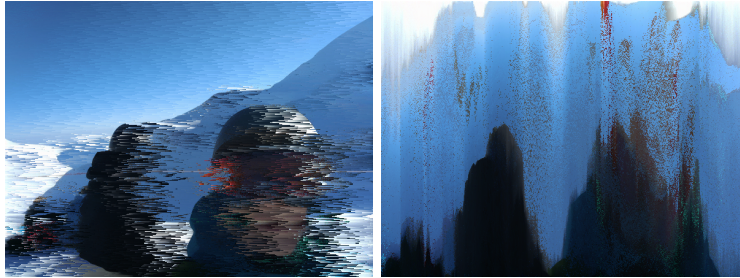and even multiple images are possible

Figure 2: multiple images as an example

Figure 3: if needed to reference separate it's possible like this

7 Script code

A simple codeblock is possible take a look at this:

```
<script>
let aVar = "this is a JavaScript variable";
console.log(aVar);
</script>
```

8 Tables etc.

Lists can be made as following:

- List an item once

- or twice

- just add more if needed

- sublists are possible aswell:

  – List an item once

  – or twice

  – just add more if needed

If you are looking for tables, here it is:

	1	2	3	4	5	6
Dota 2	31 min	H	++	Z	<40\$	Kosmetisch
PoE	∞	H	++	Z	<\$440	Shoppunkte
The Witcher 3	48.5h	H & C		Z	\$24	AddOn

Table 1: Statistik Spiellänge wurde erfasst von `https://howlongtobeat.com` und `http://steamspy.com/`.

9 Referenzen und Akronyme

Glossary

Long Glossary Entry Here is the description of a long entry 2

Tensorflow.js The Tensorflow software released as a JavaScript library for websites and webapplications 2

Acronyms

ML Machine Learning. 2

OSS Open Source Software. 2

References

[1] Michael Copeland. The Difference Between AI, Machine Learning, and Deep Learning? — NVIDIA Blog, 2016.

[2] Wikipedia. Scripting language, 2014.

[3] Netta Iivari, Henrik Hedberg, and Tanja Kirves. *Usability in Company Open Source Software Context - Initial Findings from an Empirical Case Study*, pages 359–365. Springer US, Boston, MA, 2008.

[4] Mohammad AlMarzouq, Li Zheng, Guang Rong, and Varun Grover. Open source: Concepts, benefits, and challenges. *Communications of the Association for Information Systems*, 16(1):37, 2005.

[5] Heise Online. Aus für LiMux münchner stadtrat sagt zum pinguin leise servus, 2017.

[6] Nikos Viorres, Papadopoulos Xenofon, Modestos Stavrakis, Evangelos Vlachogiannis, Panayiotis Koutsabasis, and John Darzentas. Major hci challenges for open source software adoption and development. In *International Conference on Online Communities and Social Computing*, pages 455–464. Springer, 2007.

List of Figures

List of Tables