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Antonin_Sumner_

Architecture_Design_

Education

_Architecture school of Marne-la-vallée
___Master of architecture 2005-2011
___HMONP diploma 2012

Work

_AIA Architects_Lyon, France
___Assistant Architect 2012
Took part in **Grand Hotel Dieu restoration** project drawing.

_AAGroup_Valence, France
___Junior project manager 2013-2015
Led projects at various scales from architectural design to urban design (Housing, Primary school, College school, private houses).

_AAMCO architects _ Lyon, France
___Project manager and Lead Designer 2015-2019
Led project competitions as lead designer on various project types and scales.



LORD Aerospace parts factory _ Valence, France



Pilgrims welcoming center _ Paray-le-Monial, France



NEXANS research lab _ Lyon, France

Toolkit

_Autodesk Autocad
_Autodesk REVIT
_Archicad
_Sketchup
_Adobe Photoshop
_Adobe Indesign
_Microsoft Excel

Computer_Science_

Education

_RICE University_COURSERA
___An introduction to Interactive programming 2018
___Principles of computing 2019
___Algorithmic thinking 2019

_MIT_OpenCourseware
___18.06 Linear Algebra 2019
The course covers **matrix theory** and **linear algebra**.

_FAST.AI
___Practical deep learning for coders 2019
Learn to implement best practice deep learning techniques in the most widely used current areas.
• **Computer Vision** for Image Classification, Object Detection, Segmentation, etc.
• **Recommendation Systems** - Collaborative Filtering, Embeddings, etc.
• **Natural Language Processing** _ Classification, Generation
• Sequence Analysis - **Timeseries**

___Deep Learning from the foundations 2019-2020
Learn to build state of the art deep learning models from scratch and **re-implement most of Pytorch** and Fastai's functions:
• Efficient **Matrix multiplication**
• Better **initialization methods** (LSUV) and **non-linearities**
• **Forward pass** and **Backward pass** on fully connected net
• Fully **customizable training loop** with callbacks and hooks
• **Convolutions and Resnet**
• **Optimizers** - WeightDecay, Mom, Debiasing, Adam, Lamb
• **BatchNorm** - LayerNorm, GroupNorm, RunningBN
• **Data Augmentations** - Mixup, LabelSmooth
• **Mixed Precision training**

Competitions

_Kaggle.com
___ASHRAE - Great Energy predictor III
Timeseries prediction — Score: 1.42 (RMSLE)
___Skin cancer lesions HAM10000 dataset
Image classification — Accuracy: 0.81

Projects

See my github repos: github.com/Brainkite

Toolkit

_Python 3
_Pandas
_NumPy
_PyTorch
_Fastai library
_Jupyter Notebook / Lab
_Google Cloud Platform & GPUs