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Nationality:
French + American
Residency:
Lyon - France

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 Lyon's **Grand Hotel Dieu restoration** project.

_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

Ai_Computer_Science_

Education

_RICE University_COURSERA
___Interactive programming 2018
___Principles of computing 2019
___Algorithmic thinking 2019

_MIT_OpenCourseware
___18.06 Linear Algebra 2019
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 **implement most of Pytorch** and Fastai's
functions:
· Efficient **Matrix multiplication**
· Better **initialization methods** (LSUV) and **non-linearities**
· **Forward and Backward pass** on fully connected nets
· Fully **customizable training loop** with callbacks and hooks
· **Convolutions and Resnet**
· **Optimizers** - WeightDecay, Mom, Debiasing, Adam, Lamb
· **BatchNorm** - LayerNorm, GroupNorm, RunningBN
· **Data Augmentations** - Mixup, LabelSmoothing

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

Projects
__SketchAugmented
Architecture sketching app with live Ai image prediction

Toolkit
_Python + Swift + Matlab (currently learning)
_PyTorch
_NumPy
_Pandas
_Fastai library
_Jupyter Notebook / Lab
_Google Cloud Platform & GPUs