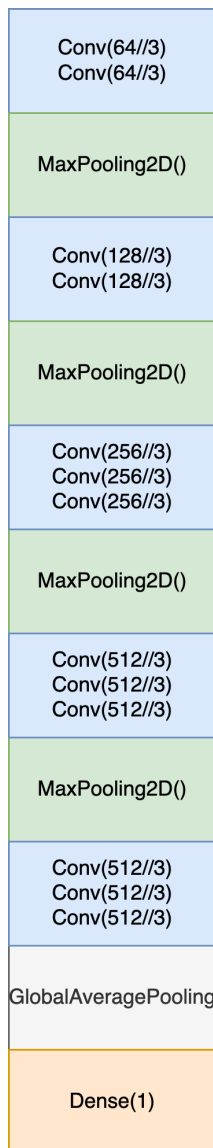# Appendix: Visual Interpretability of Image-based Real Estate Appraisal
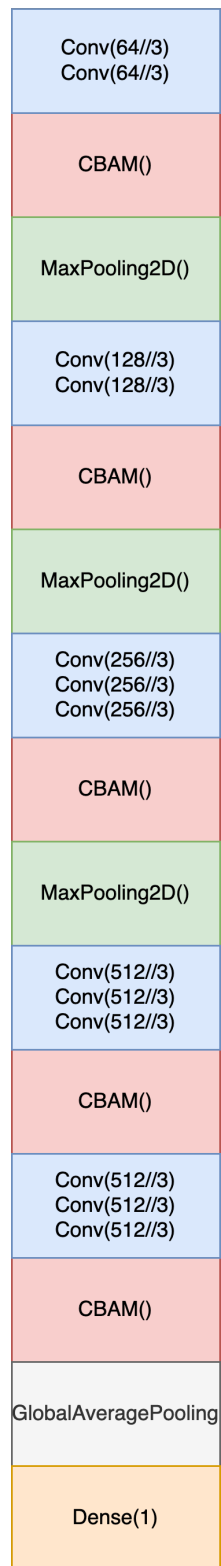
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In this appendix, details about the models architectures are shown. Figure 1 indicates the architectures used for Model 1a and 1b, while Figure 2 outlines the architecture of Model 2a and 2b.

Model 1A: Based on VGG16

Conv(64//3) Conv(64//3)
MaxPooling2D()
Conv(128//3) Conv(128//3)
MaxPooling2D()
Conv(256//3) Conv(256//3) Conv(256//3)
MaxPooling2D()
Conv(512//3) Conv(512//3) Conv(512//3)
MaxPooling2D()
Conv(512//3) Conv(512//3) Conv(512//3)
GlobalAveragePooling
Dense(1)

Model 1B: Based on VGG16 and including CBAM

Conv(64//3) Conv(64//3)
CBAM()
MaxPooling2D()
Conv(128//3) Conv(128//3)
CBAM()
MaxPooling2D()
Conv(256//3) Conv(256//3) Conv(256//3)
CBAM()
MaxPooling2D()
Conv(512//3) Conv(512//3) Conv(512//3)
CBAM()
Conv(512//3) Conv(512//3) Conv(512//3)
CBAM()
GlobalAveragePooling
Dense(1)

Legend:
Conv(Number of filters//Kernelsize)

Figure 1. Details of the architecture of Models 1a and 1b. Both are based on VGG16. Model 1b uses Convolutional Block Attention Modules (CBAM).

Model 2A: ResNet Architecture
Model 2B: Uses ResCBAM Blocks instead of ResBlocks

Conv(64//7)

MaxPooling()

ResBlock(64,64,256)   x3

ResBlock(128,128, 512)   x4

ResBlock(256,256, 1024)   x6

ResBlock(512,512, 2048)   x3

GlobalAveragePooling

Dense(1)

Legend:
ResBlock(Filters, Filters, Filters)
Conv(Filters//Kernelsize)

ResBlock

Input

BatchNorm

Conv(//1)

BatchNorm

Conv(//3)

BatchNorm

Conv(//1)

Addition

ResCBAMBlock

Input

BatchNorm

Conv(//1)

BatchNorm

Conv(//3)
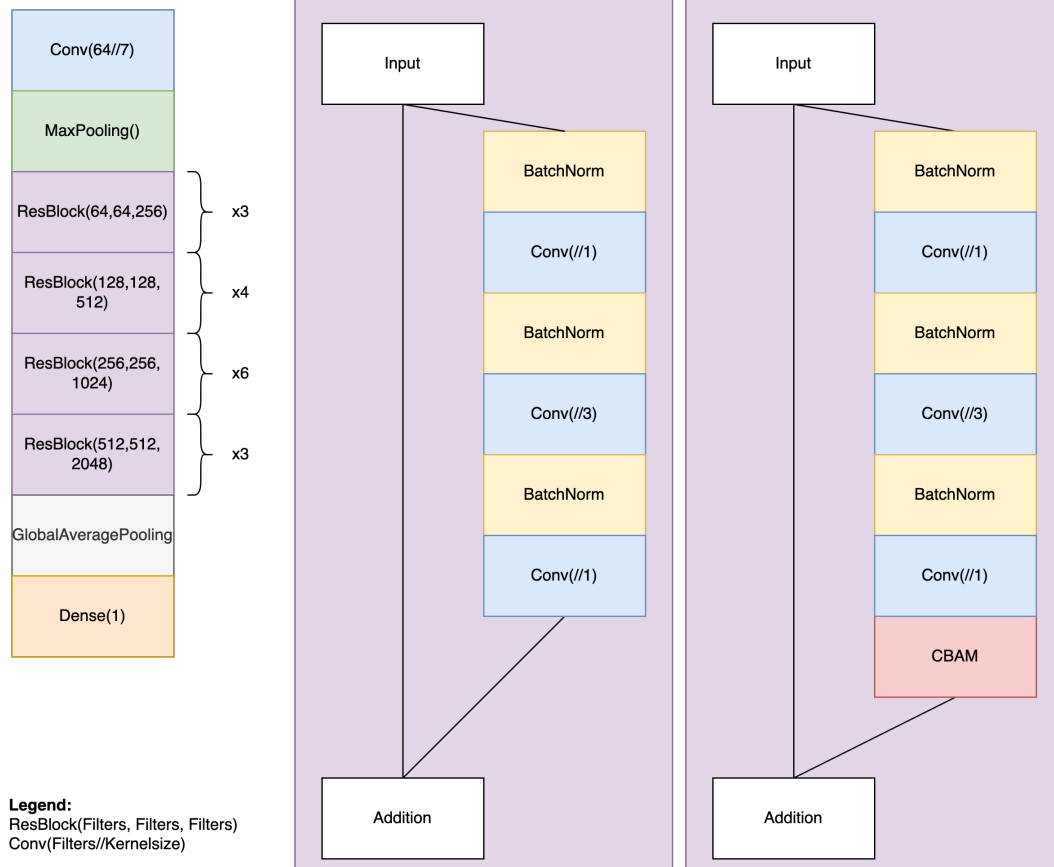
BatchNorm

Conv(//1)

CBAM

Addition

Figure 2. Details of the architecture of Models 2a and 2b. Both are based on Resnet50v2. Model 2b uses Convolutional Block Attention Modules (CBAM).