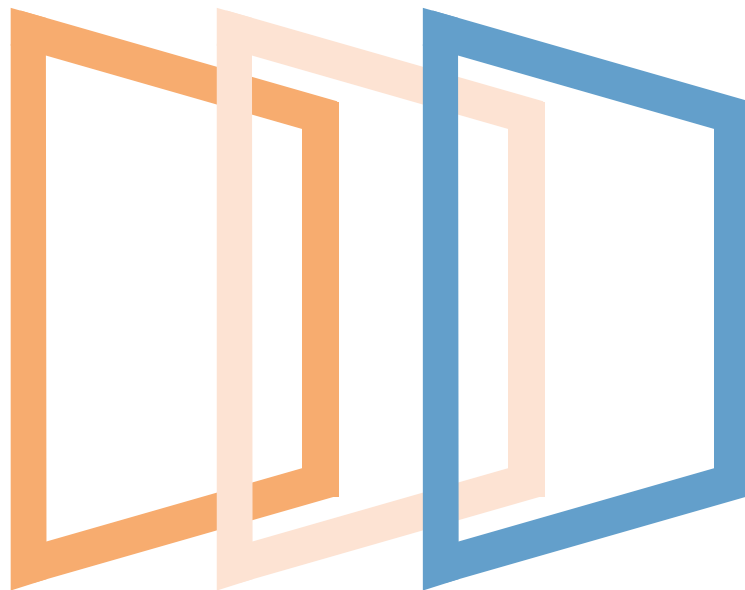


# Redes Neurais Intermediário

Diego Alexandre

Práticas Tecnológicas, 11.11.2024

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# Índice

1. Transfer Learning
  1. VGG
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2. Auto ML

# Transfer Learning

01

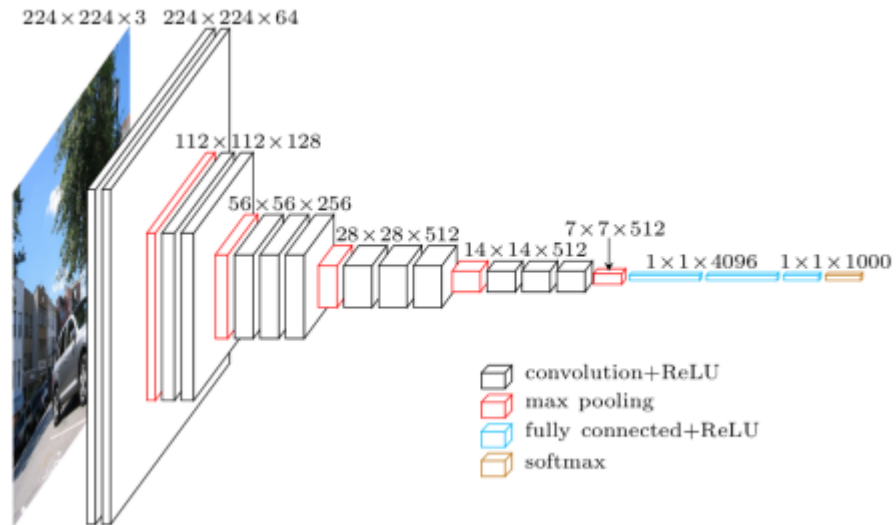
# Transfer Learning

- Utilizar uma rede já treinada em outro problema para facilitar o aprendizado para o seu problema.
- Ideal que os problemas sejam parecidos.

# Transfer Learning

- Para vários tipos de tarefas existem benchmarks.
- Geralmente arquiteturas do estado da arte são treinadas neles.
- Assim é possível facilitar o treino para sua tarefa.

# VGG



# Inception

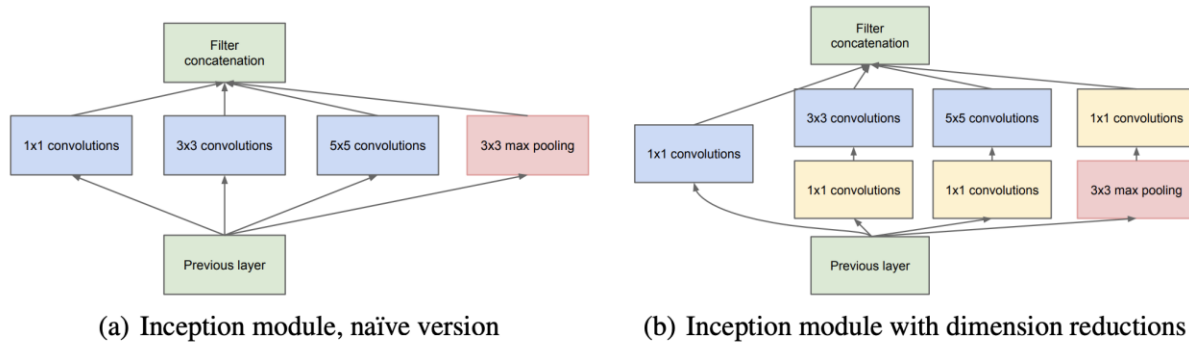
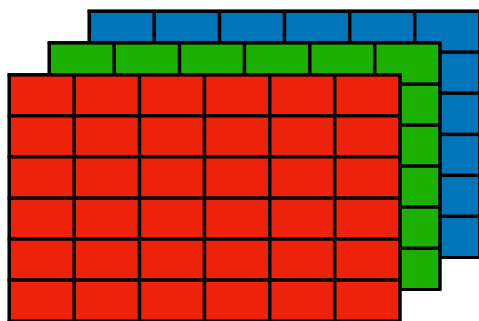


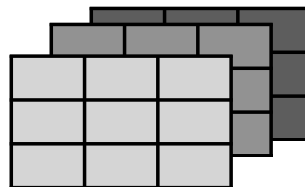
Figure 2: Inception module

# Relembrando Convolução 3D



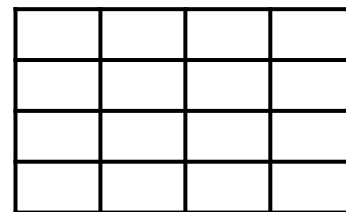
6 x 6 x 3

\*



3 x 3 x 3

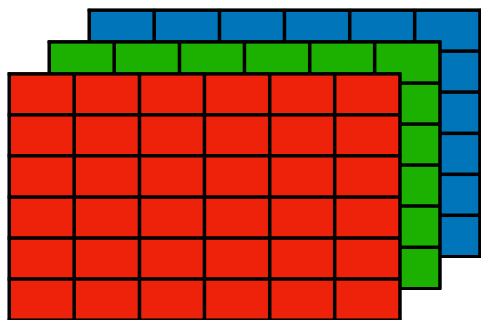
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4 x 4

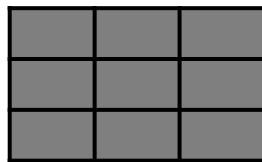


# DepthWise Convolution

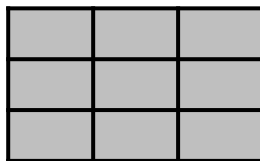


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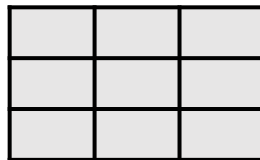
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3 x 3 x 1

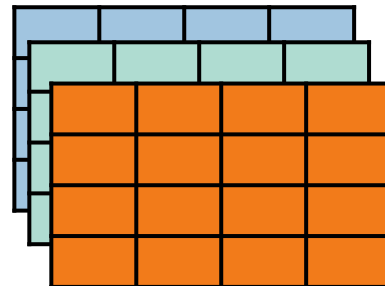


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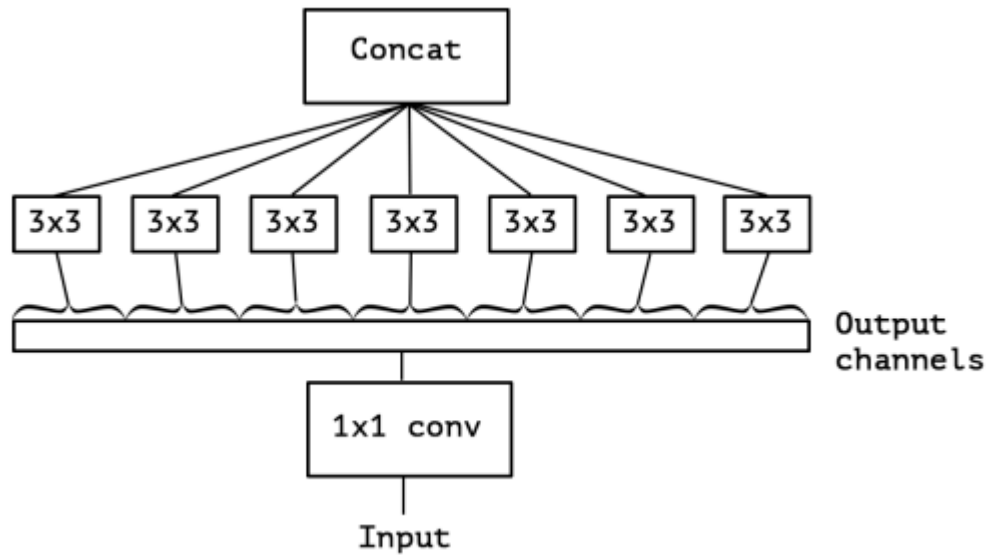
3 x 3 x 1

=



4 x 4 x 3

# Xception



# Auto ML

02

# AutoML

- Automatizar os processos de data science
- Desde a preparação dos dados a escolha do modelo e parâmetros

# AutoML

- Existem diversas implementações de ferramentas de AutoML
- Google, Microsoft, Databricks e Amazon
- Também existem implementações open source

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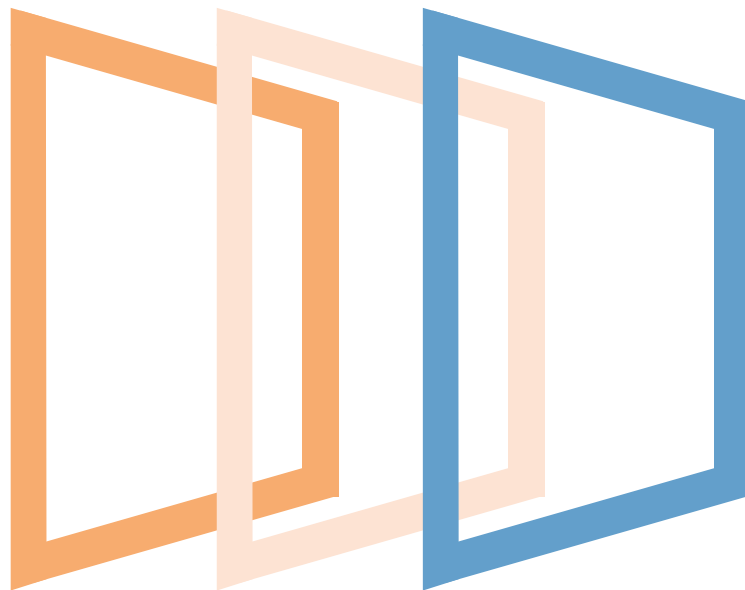
# Redes Neurais Convolucionais

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