

# Amazon Best Price Finder (BPF)

Samad Memon





Ohuhu Hammock Chair Hanging  
Chair Swing with Soft Cushion &  
Durable Hanging Hardware Kit, 100%  
Cotton Rope Indoor Macrame Swing...

★★★★★ ▼ 26

\$71<sup>99</sup>

Amazon.com: chair swing

amazon.com?s=k=chair+swing&qid=1576107643&ref=sr\_pg\_1

All chair swing

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1-48 of over 2,000 results for "chair swing"

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Department

Patio, Lawn & Garden Hammocks Porch Swings Hammock Chairs Patio Dining Chairs Patio Lounge Chairs Patio Sling Chairs Patio Chairs [See All 13 Departments](#)

Avg. Customer Review

★★★★★ & Up ★★★★★ & Up ★★★★★ & Up ★★★★★ & Up

Brand

Sorbus  Best Choice Products  ARAD  ZENY  OUTREE  SueSport  CCTRO  Modway  Christopher Knight Home  Hammock Sky  Sunnydaze Decor  Sunnydaze Décor  Lazy Daze Hammocks  Blisun  Outsunny

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AmazonBasics Low-Back Computer Task Office Desk Chair with Swivel Casters - Blue

★★★★★ 2,891 [prime](#)



AmazonBasics Low-Back Computer Task Office Desk Chair with Swivel Casters - Black...

★★★★★ 1,247 [prime](#)

**Best Seller**



Sponsored ⓘ Amish Heavy Duty 800 Lb Roll Back Treated Porch Swing with Hanging Chains and Cupholders (4 Foot, Cedar Stain)

★★★★★ 384

\$239<sup>00</sup>

\$39.00 shipping



Sponsored ⓘ Porchgate Amish Heavy Duty 800 Lb Rollback Console Treated Porch Swing With Hanging Ropes (Cedar Stain)

★★★★★ 4

\$309<sup>99</sup>

\$39.00 shipping



Sponsored ⓘ Y-STOP Hammock Chair Macrame Cotton Rope Hammock Swing Chair for Indoor and Outdoor use(Beige)

★★★★★ 2

\$42<sup>99</sup> \$49.99

FREE Shipping by Amazon  
In stock on December 19, 2019.

**Amazon's Choice**



Sorbus Hanging Rope Hammock Chair Swing Seat for Any Indoor or Outdoor Spaces- Max. 265 Lbs -2 Seat Cushions Included

★★★★★ 1,166

\$31<sup>99</sup> \$102.52

[prime](#) Get it as soon as Mon, Dec 16  
FREE Shipping by Amazon  
More Buying Choices  
\$28.08 (6 used & new offers)



E EVERKING Hammock Chair Macrame Swing, Hanging Cotton Rope Macrame Hammock Swing Chair for Indoor, Outdoor Home,...

★★★★★ 175 [prime](#) Get it as soon as Sat, Dec 14  
FREE Shipping by Amazon



Ohuhu Hammock Chair Hanging Chair Swing with Soft Cushion & Durable Hanging Hardware Kit, 100% Cotton Rope Indoor Macra...

★★★★★ 27 More Buying Choices  
\$74.99 (1 new offer)

Ad feedback

# GOAL

Design a program to  
find the best priced  
product for your  
desired style



# Best Price Finder (BPF)

Product URL

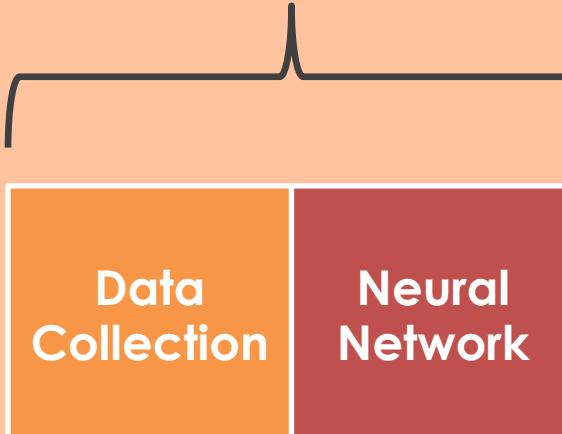


Ohuhu Hammock Chair Hanging Chair Swing with Soft Cushion & Durable Hanging Hardware Kit, 100% Cotton Rope Indoor Macrame Swing...

★★★★★ ~ 26

\$71<sup>99</sup>

BPF



Best Deal



Karriw Hammock Chair Macrame Swing,Cotton Hanging Macrame Hammock Swing Chair Ideal for Indoor, Outdoor, Home,Bedroom,...

★★★★★ ~ 39

\$46<sup>99</sup> \$50.99

# Data Collection

Product URL  
[https://www.amazon.com/Ohuhu-Hanging-Bedrooms-Hammock-Hardware/dp/B07P5RV5L1/ref=sr\\_1\\_19?keywords=chair+swing&qid=1575899740&sr=8-19](https://www.amazon.com/Ohuhu-Hanging-Bedrooms-Hammock-Hardware/dp/B07P5RV5L1/ref=sr_1_19?keywords=chair+swing&qid=1575899740&sr=8-19)

Search Keyword  
“chair swing”



Product Images for All Search Results



⋮  
⋮  
⋮

Product Image



# Neural Network

- VGG16
  - Convolutional Neural Network pre-trained on over 14 million images
  - Excellent at detecting edges and patterns



# Neural Network: Dissected VGG16



Convolutional  
and Max  
Pooling Layers

Feature Vector

[0.03  
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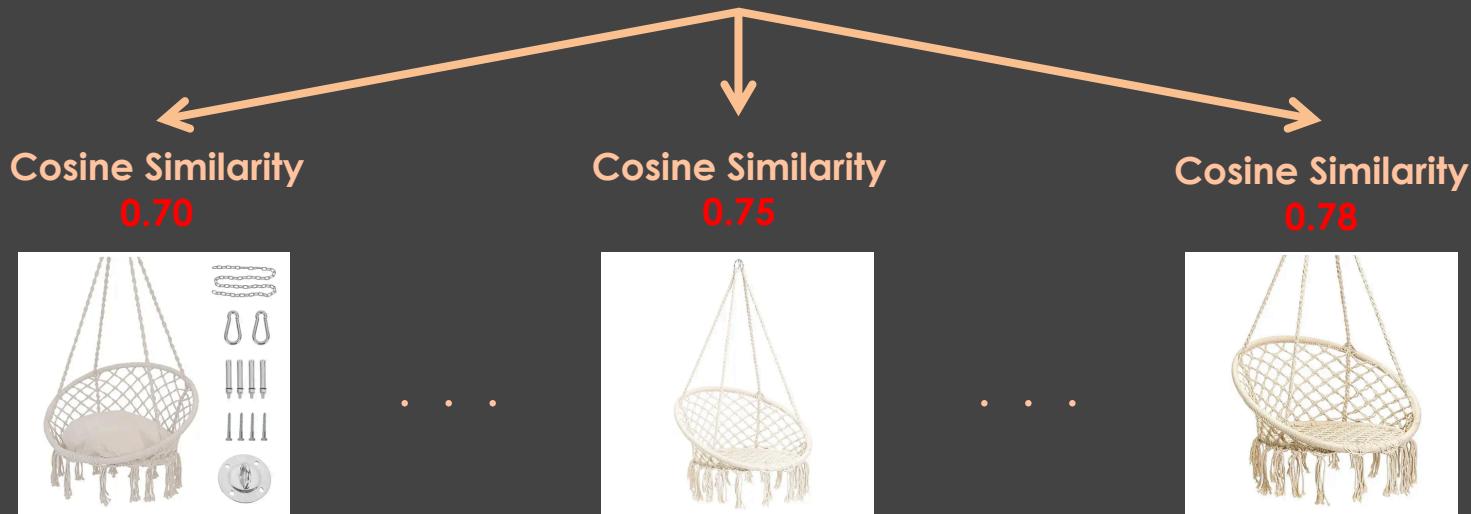


Convolutional  
and Max  
Pooling Layers

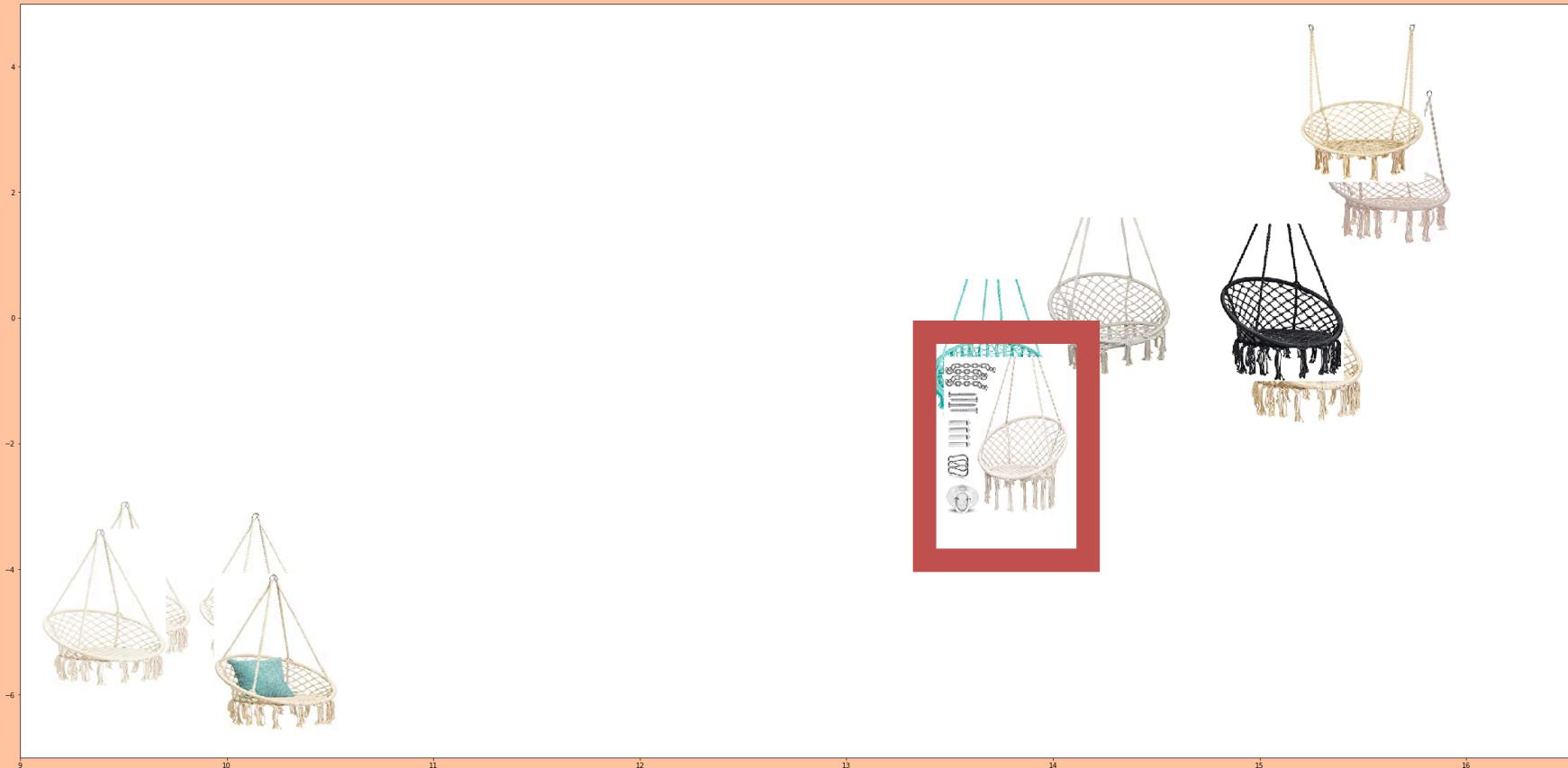
Feature Vector

[0.01  
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0.02]

# Calculate Cosine Similarity



# t-SNE Image Graph Representation



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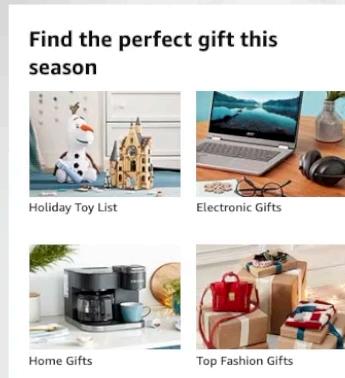
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# THANKS!



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