ToolScape: Enhancing the Learning Experience of How-to Videos

CHI2013 Student Research Competition

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with Phu Nguyen (MIT CSAIL), Krzysztof Z. Gajos (Harvard SEAS), and Robert C. Miller (MIT CSAIL)





oad

Filters *

About 24,900 results



Adobe Photoshop Tutorial: Instagram Nashville Effect (Vintage/Retro)

by InvisionModz = 1 year ago = 228,534 views

Follow me on Twitter! https://Twitter.com/InvisionModz Like on Facebook! https://

HD



Photoshop Cs5 Tutorial: Instagram Nashville Effect (Vintage / Retro)

by Justthisgood * 1 year ago * 126,534 views

In this Adobe **Photoshop** Tutorial, Learn how to create the Instagram filter



Photoshop Tutorial: Vintage/ Retro effect- HOW TO

by xHawtTutorials = 1 year ago = 195,161 views

yo! :D anyways, this is my first video. a lot of people are wanting to know how to

HD



Photoshop Retro Effect

by pfltuts - 4 years ago - 29,033 views

www.pixelforlife.com I show how to create the most common retro effects. Be sure

Problems in Finding Relevant Videos



Convert a Photo to a Sketch :: Photoshop Tutorial

by **helpvid** - 3 years ago - 8,541 views www.helpvid.net http In this tutorial, you will learn how to **convert a photo** ...

Learners can't tell what actually happens in a tutorial.

ToolScape Design Insight 1

Summarize & present workflow information in search results



Convert a Photo to a Sketch :: Photoshop Tutorial

by **helpvid** = 3 years ago = 8,541 views www.helpvid.net http In this tutorial, you will learn how to **convert a photo** ...

Convert a Photo to a Sketch :: Photoshop Tutorial

http://www.helpvid.net http://seoninjaforum.com In this tutorial, you will learn how to convert a photo to a sketch in Photoshop CS4. To achieve this we will... 5 steps | 4:56 | by helpvid | 3 years ago



Image > Adjustments > Desaturate



Layer > Duplicate

Layer

Image > Adjustments >
Invert



color dodge



ToolScape Design Insight 1

Summarize & present workflow information in search results

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Desaturate



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Layer

Image > Adjustments > Invert



color dodge



- Tools used
- Initial / Final products, Progress over time
- Complexity, Number of steps

Retro Effect

Total: 10 videos | average 11 steps

Showing all videos



Retro Style Color Grade-Photoshop Tutorial

hey, back again with another photoshop tutorial. this time on a retro style color grade where the reds in the highlights are pushed up and the blues and gree... 8 steps | 8:49 | by Z0mbieKangar00 | 2 years ago



Layer > New Adjustment Layer >

Hue/Saturation



Layer > New Adjustment Layer > Curves



Layer > New Adjustment
Layer > **Levels**



Views

Simple

Make your pictures look Retro! (Retro Vintage Effect) - Photoshop Tutorial (HD) - NEO HD

In this tutorial ill teach you guys how to do the retro + vintage effect in an easy way using adjustment layers and more. 10 steps | 4:56 | by NeoMiguelHD | last year



Layer > New Fill Layer > Gradient



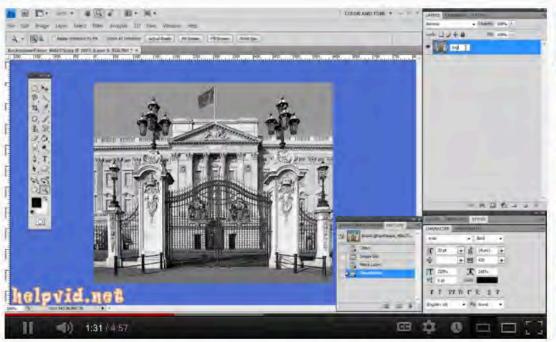
Layer > New Fill Layer > Solid Color



Layer > New Adjustment
Layer > Curves









Photoshop "Water effect"

by Sander Ndreca

621,433 FEATURED



Weight Loss in Photoshop

by helpvid 22,508 views



Photoshop Tutorial 3D Flag

by halpvid 8.217 Views



Animate an Image in Photoshop

by helpvid 1.010 views



Lightning Strike ...: Photoshop Tutorial..::

by helpvid 1,143.vinyus



Photoshop-Tablet

127 videos PLAYLIST



Turn a Photograph Into A Drawing | Photoshop

by ChChCheckItsCian 8:55 23,862 views



TUTORIAL "HOW TO DO A VECTOR PINUP IN

by Adrian Bacuta 346,826 Views



Photoshop - Convert Photo to Pencil Sketch

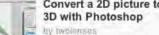
by DylanWonderland 133,236 Views



Convert a 2D picture to

23,761 views





Ilsing Photoshop to

Convert a Photo to a Sketch :: Photoshop Tutorial



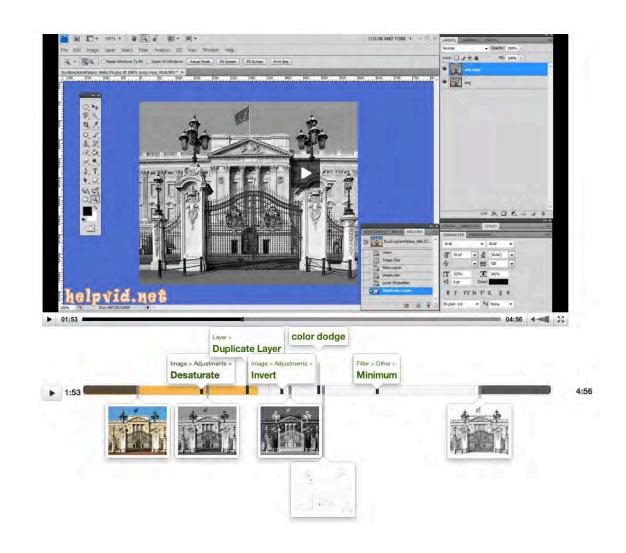
Problems in Watching



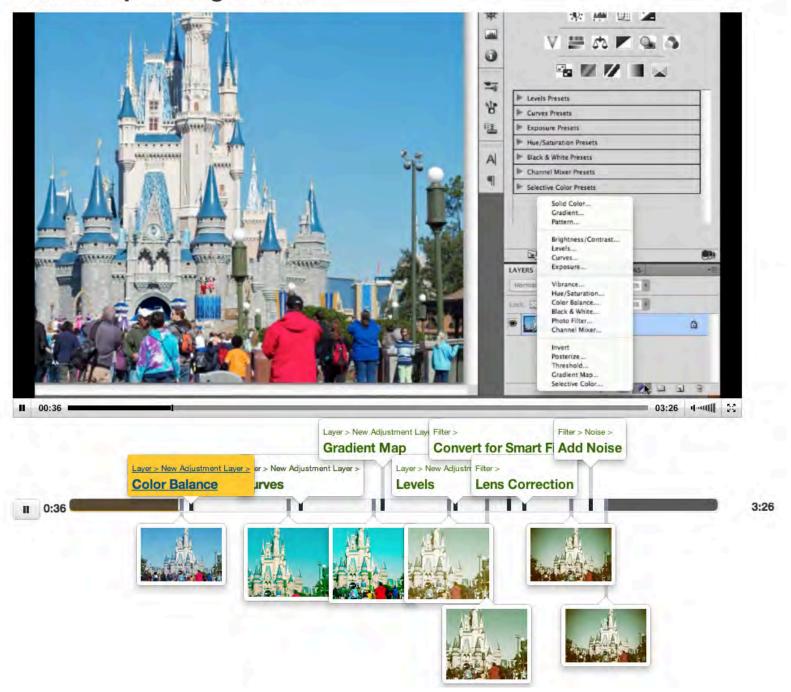
It's difficult to navigate to specific parts you're interested in.

ToolScape Design Insight 2

• Give learners more interactivity & control in navigating a how-to video



Photoshop: Vintage Effect

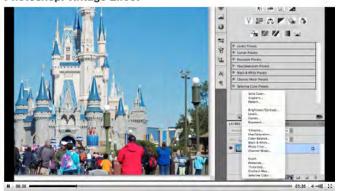


User Study: Photoshop Design Tasks

Does ToolScape help users learn and apply new skills in a Photoshop design task?

Baseline

Photoshop: Vintage Effect



Retro Effect

Total: 10 video



Retro Style Color Grade-Photoshop Tutorial

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Make your pictures look Retro! (Retro Vintage Effect) -

Photoshop Tutorial (HD) - NEO HD

In this tutorial ill teach you guys how to do the retro + vintage effect in an easy way using adjustment layers and more

4:56 | by NeoMiquelHD | last year



Retro Look Photoshop Tutorial

"Open Me!" Hey Guys Knightkoala Here. Here is a tutorial on how to get a sort of Retro/Vintage look to your pictures in photoshop. I personally really like t...

5:07 | by knightkoala | last year



How to Create a Vintage Photo Look in Photoshop

How to Create a Vintage Photo Look in Photoshop - Video Tutorial by Yanik's Photo School 5:10 | by Touch Photo I 3 waters and

Miles Control of Leaves and Control of Section 1



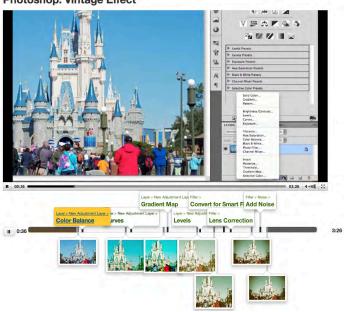
Vintage prints from modern photos - Photoshop Week 40

Watch in HQ http://www.youtube.com/watch?v=85WjLBsJVjc&fmt=18 Some pictures are timeless so why not turn the clock back and create an antique photo from a mo...

:15 | by PhotoGavin | 4 years ago

ToolScape

Photoshop: Vintage Effect



Retro Effect



With ToolScape, learners will...

H1. feel more confident about their design skills.

- self-efficacy gain

H2. believe they produced better designs.

- self-rating on designs produced

H₃. *actually* produce better designs.

- external rating on designs produced



User Designs: Retro Effect



Baseline













User Designs: Retro Effect

ToolScape















User Designs: Photo to Sketch



Baseline













User Designs: Photo to Sketch

ToolScape









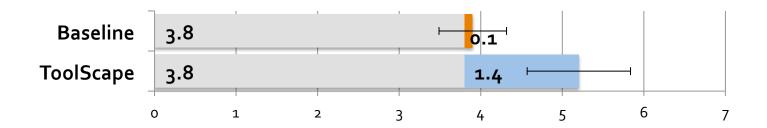




H1) Higher self-efficacy gain with ToolScape

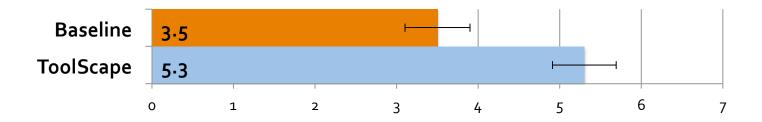
Four 7-Likert scale questions

Mann-Whitney's U test (Z=2.06, p<0.05), error bar: standard error



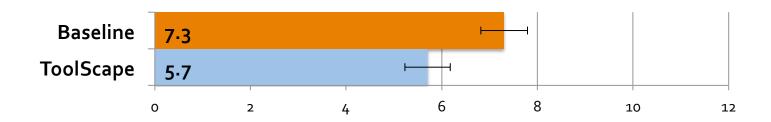
H2. Higher self-rating with ToolScape

- One 7-Likert scale question
- Mann-Whitney's U test (Z=2.70, p<0.01), error bar: standard error



H3. External raters rank ToolScape designs higher. (Ranking: Lower is better)

- Wilcoxon Signed-rank test (W=317, Z=-2.79, p<0.01, r=0.29), error bar: standard error
- Krippendorff's alpha = 0.753



Non-sequentially navigating video

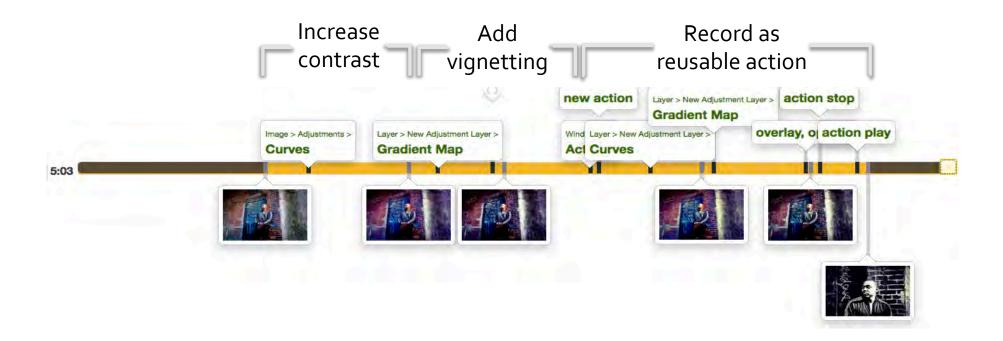
Interactive links: clicked 8.9 times per task

"It is great for <u>skipping</u> straight to relevant portions of the tutorial."

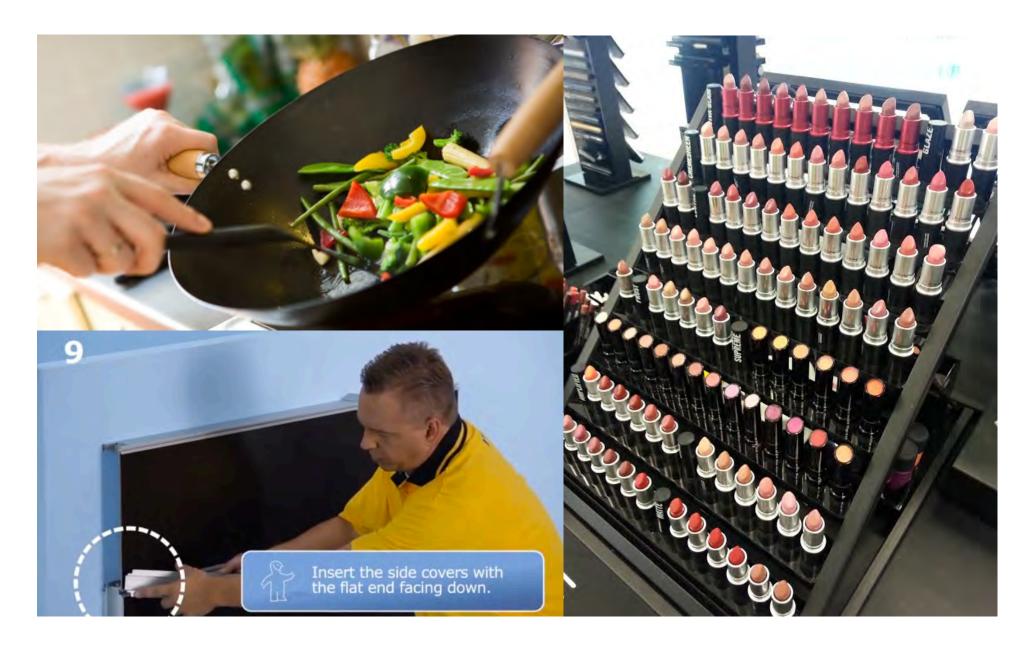
"It was also easier to go back to parts I missed."

Ongoing Work

Capture higher level intentions and goals

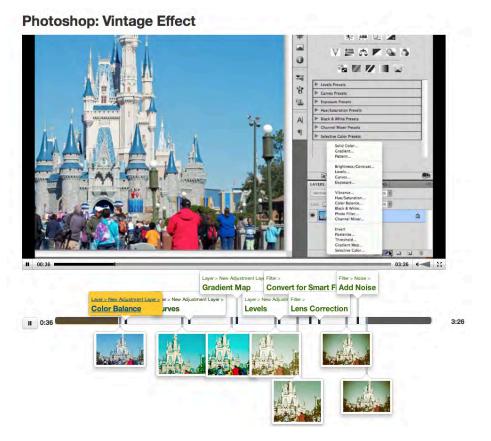


Beyond Photoshop Demonstrations



ToolScape

Enhancing the Learning Experience of How-to Videos



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