Are you for the Red team or the Orange team? Part 2
Our development team

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Corrected footage of the “Purple Out” game, Fall 2018
The fans notice

Sierra
Twitter › sierrastubble

Clemson is looking good in Duke Blue tonight 😈

22 minutes ago

Chip Acker
Twitter › ChipAcker

Hey @ESPNCFB @ESPN can you send a truck engineer that knows how to white balance a camera to Clemson? Our purple uniforms look like Florida blue. #ESPNfail

36 minutes ago

Katherine Fitzgerald
Twitter › kfitz134

hello 911, the color balance has clemson looking like they’re playing in duke blue, plz advise???

34 minutes ago
Corrected footage 2015 Notre Dame game with an orange uniform
Oy. The color is off on our TV. The Clemson uniforms look like UF Gators! I’m going to have to concentrate on this game. 😞🏈💰

Turned on tv to watch #clemson v #OK but looks like they're replaying #Falcons v Carolina. worse, something's wrong with tv color.

It's not your TV... Just another flawless ESPN execution! 😫olicy The grass doesn't even look right.
So what impacts color?
Problem 1:
Adjustments to scene changes
Problem 2: Need to adjust images only in specific areas

Fix it

Leave it
Background
Current system in filmmaking
Current system in athletics
Artificial Intelligence Approach

- Create a data set
- Train the algorithm
- Apply to video frames on the fly
ColorNet: Automate Brand Color Adjustment with AI

Above: An example of a color-incorrect image on the left, a corrected image in the middle, and the corresponding correction mask on the right.
Rabbit -> Polar bear (prototype to production-level device)

Initial testing on the Nvidia Jetson Nano:

<table>
<thead>
<tr>
<th>Resolution</th>
<th>FPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>360p</td>
<td>36</td>
</tr>
<tr>
<td>720p</td>
<td>12</td>
</tr>
<tr>
<td>1080p</td>
<td>6.5</td>
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</tbody>
</table>

Current system uses a Nvidia RTX 2080ti and achieves 60+ FPS on 1080p footage!
DEMO TIME
Alpha Test = Success!
Next steps with the research

- Beta test
- Patent cycle
- Conversations with industry segments
- Continued development & refinement
Support provided by...

- Clemson University Research Foundation
- Erwin Center for Brand Communications
- Robert H. Brooks Sports Science Institute
- Watt Center for Innovation

Many thanks to...

- Clemson Athletics
- Clemson University Relations
- ESPN
- Panasonic
- X-Rite
- Planar
- Daktronics
- Adobe
Thank you!

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