2006 Photosphere Developments

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Anyhere Software

Highlights of Past Year's Mods

- *Universal version for MacIntel*

- *Catalog locking feature*

- *Correct color conversions*

- *Falsecolor display of HDR images*

- *"Shadow" catalog*

- *Panorama stitching*

Universal Application

- *Runs ~10x faster than Rosetta*

- *Harder to keep updated*

  - *Need to recompile OpenEXR library*

- *Application icon messed up*

Catalog locking feature

- *Creates "write lock" file when catalog is first opened*

- *Other instances of Photosphere open catalog read-only*

- *Avoids inconsistencies when using the same catalog over NFS, etc.*

Correct color conversions

- *Added fast color conversion for LDR & HDR images*

- *Loading of floating-point TIFF now 4x faster, with or without conversion*

- *JPEG_HDR also loads much faster*

Falsecolor display of HDR images

- *Added falsecolor view for high dynamic range images using -N (View menu)*

- *Provides for linear and logarithmic scales*

- *Automatic or manual limits*

- *Works with exposure controls*

"Shadow" catalog

- *Records settings for uncataloged images*

- *Saves previously time lost rotating & cropping a folder of images, then forgetting to add them to the catalog*

- *Only saves "altered" records*
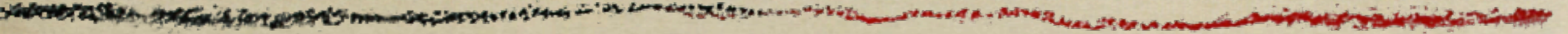
- *Transparent and requires little space*

Panorama stitching

- *Separate into high & low frequency bands*

- *Blend low frequencies using entire overlap region*

- *Splice high frequencies at detected edges*

- *If no edges, then blend high frequencies as well*
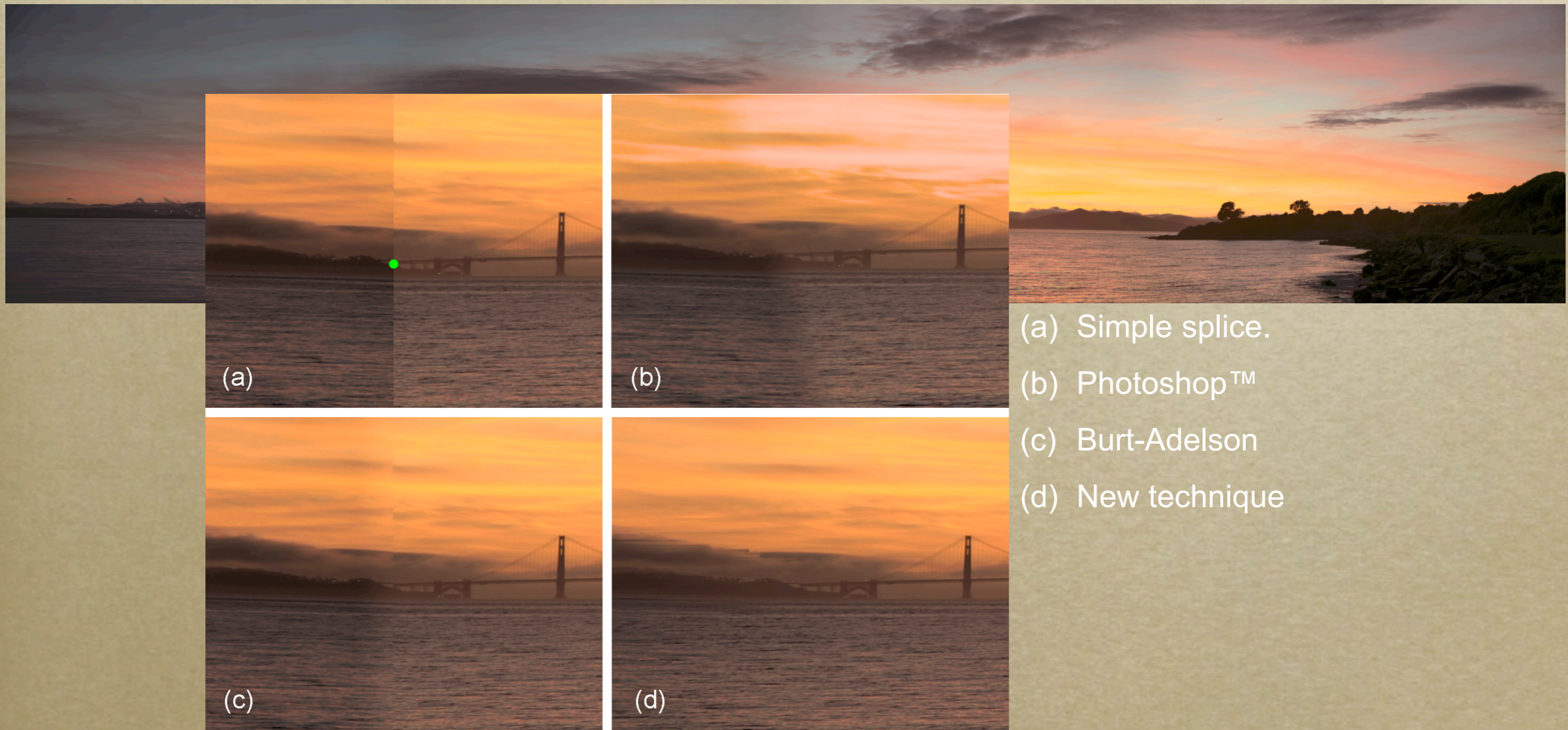
Stitching Method

Start with originals aligned at a single feature point (antenna).

Perform local scanline alignment using squash/stretch procedure.

Detect strongest edge position along each scanline for splice.

Splice HF band where edges are strong and blend otherwise.

Albany Sunset Example

(a) Simple splice.

(b) Photoshop™

(c) Burt-Adelson

(d) New technique