Alpha Pen

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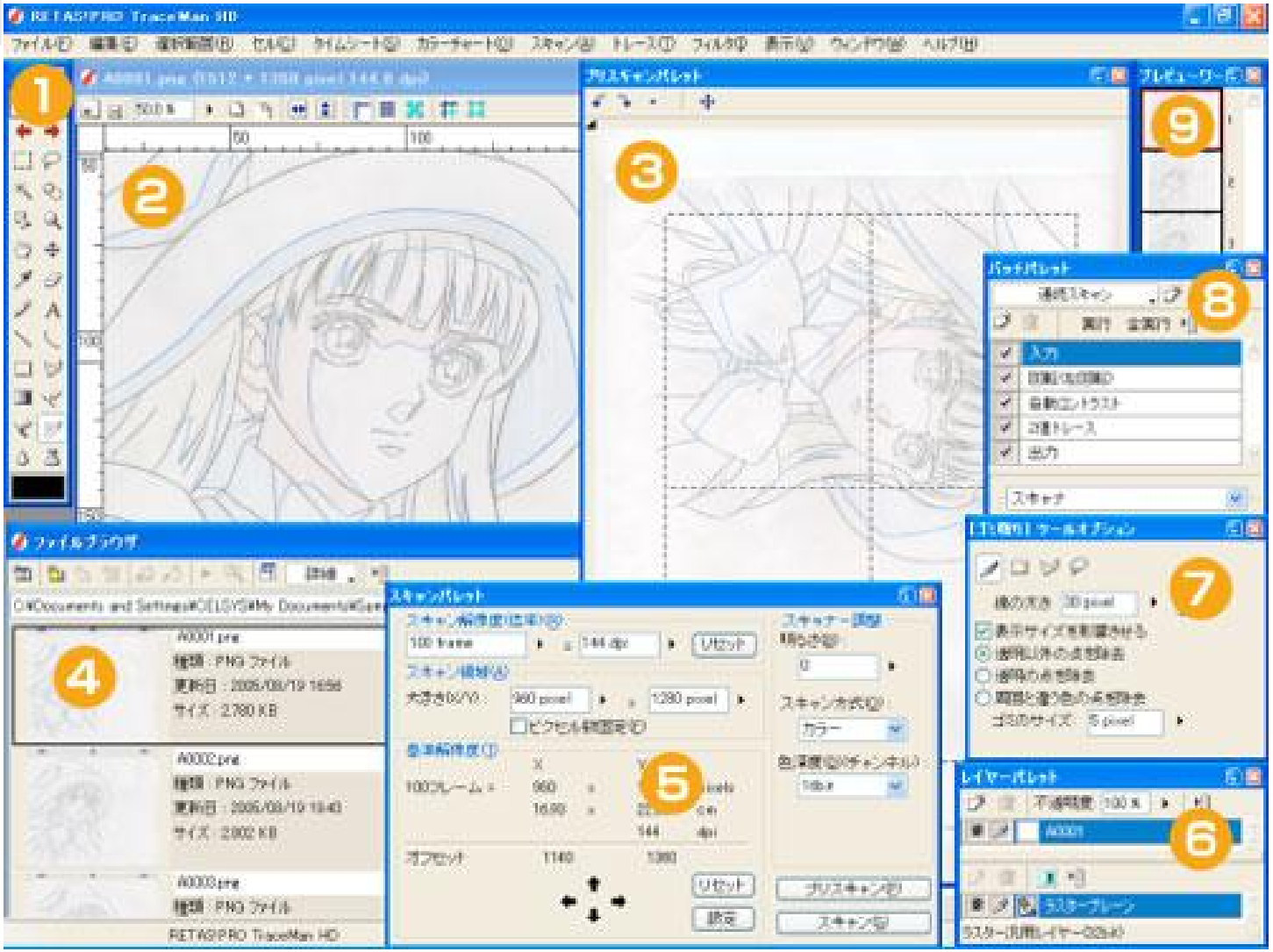
A machine learning based product to automate animation coloration

Hurt Point

Step 1: Line Tracing



Step 2: Coloration

Color Notes: Detailed View

Coloration is Low-skilled Outsourcing Job

Axis of animation

There is little about bleak and bellicose North Korea that summons to mind images of pajama-clad children enjoying their favorite TV cartoon characters. Little, that is, except the animation itself, which turns out to be one of the bizarre nation's few legitimate exports to the West.

For years French and other European production companies have contracted work to SEK Studio , based in Pyongyang, says Dominique Boischot, president of Paris-based film production company Les Films de la Perrine. Boischot routinely faxes master drawings to North Korean animators.

https://www.forbes.com/global/2003/0303/014.html#59724ce43a60

Solution

Machine Learning Algorithm for Animation Coloration

Input Images

Outputs of ConvNet

Outputs of GAN

Ground Truth

Key Success Factors

Algorithm Accuracy

- High accuracy is the key concern for industrial customers, they want to see ROI on the product.
- Large R&D investment is necessary to commercialize the algorithm.
- Industry leaders like Adobe have strong R&D team in the field and are hard to compete against.
- We will need: R&D capital, data scientists, industry know-how.

Human-Machine Collaboration

- Artist need to colaborate with machine to create art work.
- Little success in human-machine collaboration.
- The current work flow need to be redesigned.
- Current software like paintman and photoshop have advantage as their UI and work process is already accepted by the industry.

Speed

- The current research is ready for commercilization.
- Many people see the potential for automating coloration and works around art create.
- The application of machine learning is gaining speed.
- What we will need: launch our product fast.

Thank You