Mimicking Hand-Drawn Pencil Lines

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Goals

- mimic human-drawn pencil lines
- continuously create unique lines
- technique computationally inexpensive
Approach

- analysis of human line paths and texture capture
- paths: human arm model – Flash and Hogan
- line textures: statistical approach – co-occurrence matrices to synthesize realistic pencil traces
Some Examples
Evaluation: 9+9 images, 11 participants

- Correct: 58%
- Incorrect: 42%

69.5% hand-drawn (when generated)
30.5% generated (when hand-drawn)