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A modified convolutional neural network for face sketch synthesis

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**Highlights**

- A modified convolutional neural network for face sketch synthesis is proposed.
- This method is free of complex optimization problems and pre/postprocessing compared with existing methods.
- We examine the trade-off between the model and performance and in the limited case the proposed method degrades into a conventional CNN architecture.
- It improves the synthesis efficiency by one or two orders of magnitude and achieves highly competitive numerical results.
- The proposed method is more robust to inhospitable conditions and can be easily extended to RGB channels.

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