



# Lecture 12: Applications of Deep Learning with Torch

Yuan Yao  
Peking University

# Neural Style by J C Johnson

- ▶ Website: <https://github.com/jcjohnson/neural-style>
- ▶ A torch implementation of the paper
  - ▶ *A Neural Algorithm of Artistic Style*,
  - ▶ by Leon A. Gatys, Alexander S. Ecker, and Matthias Bethge.
  - ▶ <http://arxiv.org/abs/1508.06576>

# 博雅塔·未名湖

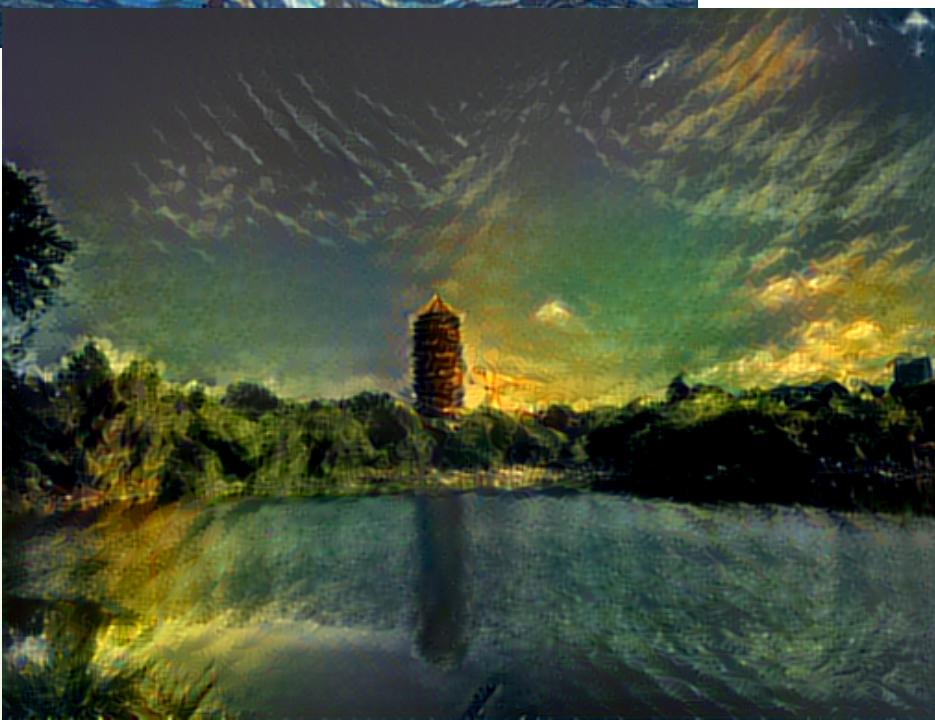
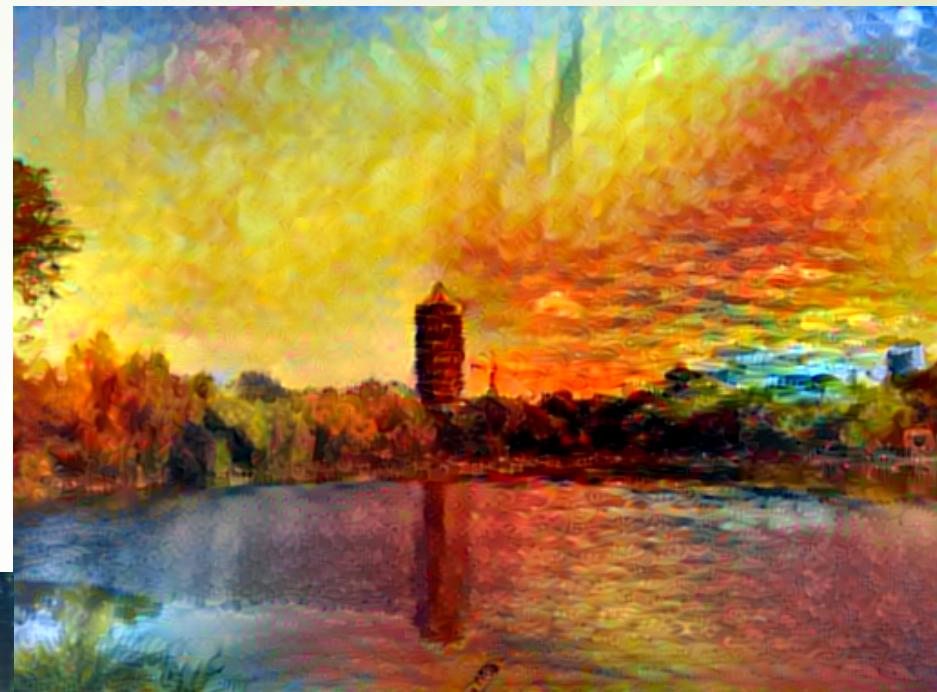
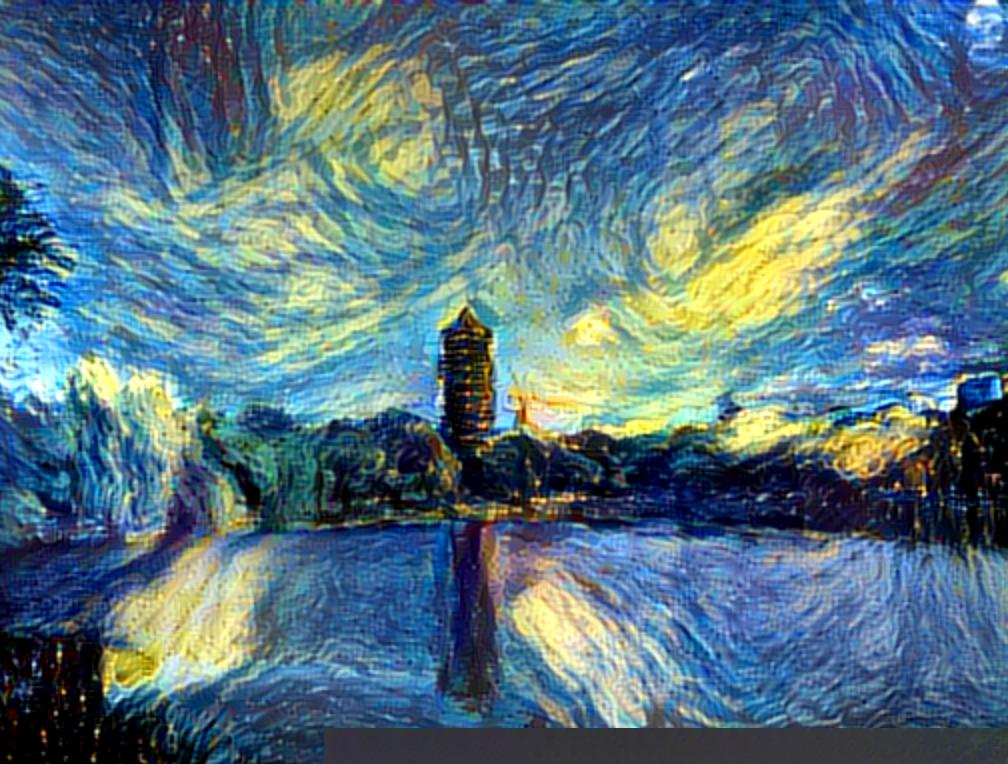




Left: Vincent Van Gogh, Starry Night  
Right: Claude Monet, Twilight Venice  
Bottom: William Turner, Ship Wreck



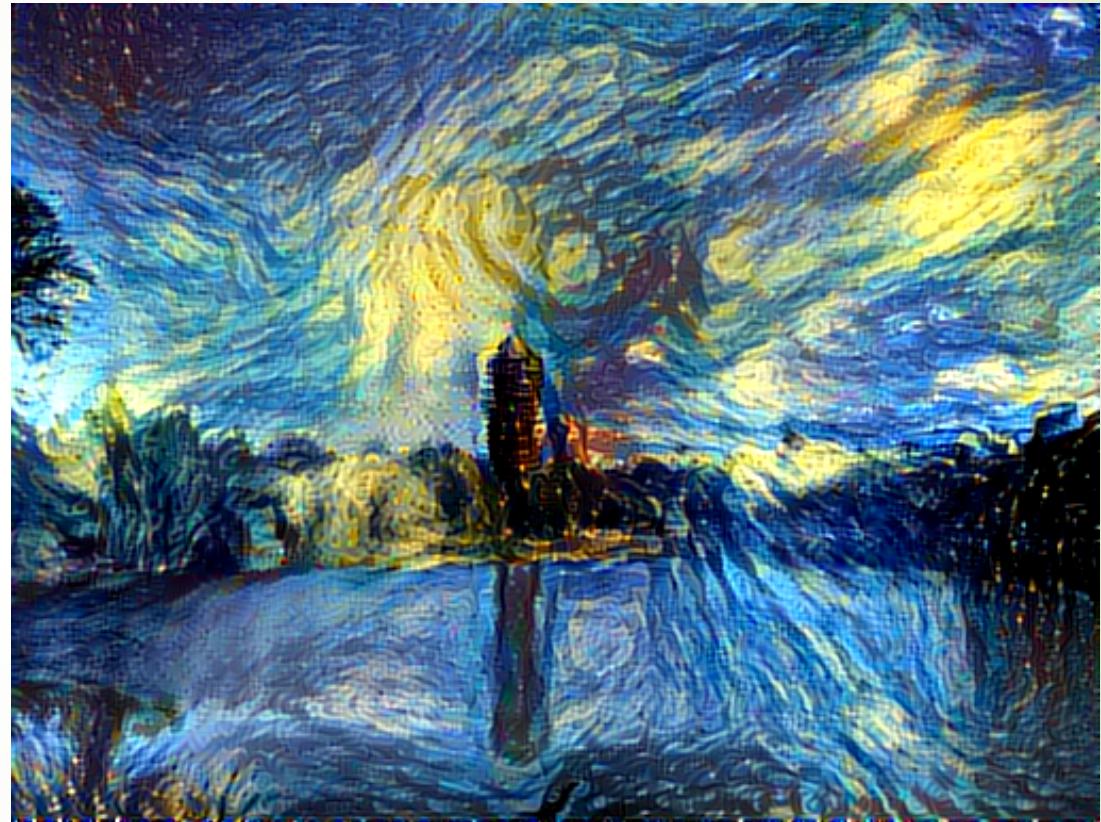
开始吧

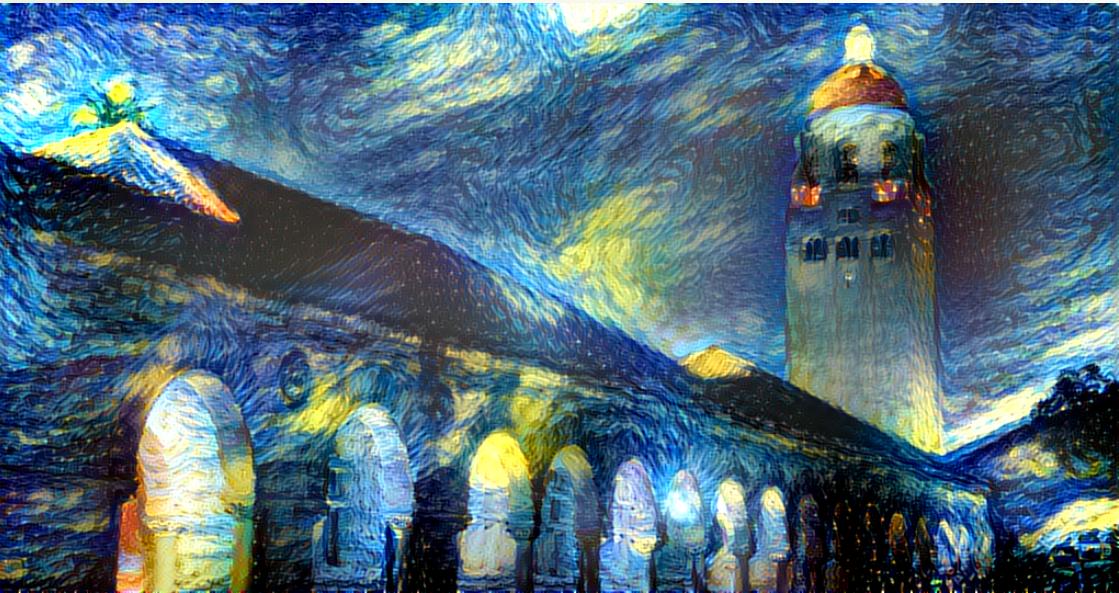


Application of Deep Learning:  
Content-Style synthetic  
pictures  
By “neural-style”

# Run neural\_style

- ▶ ssh bicmr@bicmr2 -p 2211
- ▶ cd neural-style/
- ▶ th neural\_style.lua -style\_image examples/inputs/starry\_night.jpg -content\_image examples/inputs/noname.jpg -output\_image examples/outputs/noname\_starry.png
- ▶ Different run might be different!





# Style-Content Decomposition

