

# Patsorn Sangkloy

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College of Computing, School of Interactive Computing,  
Georgia Institute of Technology  
patsorn\_sangkloy@gatech.edu

- EDUCATION**
- Doctor of Philosophy,** Computer Science 2015 – present  
Georgia Institute of Technology, Atlanta, GA,
- Master of Science,** Computer Science 2013 – 2015  
Brown University, Providence, RI,  
Cumulative GPA : 4.00,  
Courses:
- Computer Vision, Machine Learning, Artificial Intelligence, Building Intelligence Robot, Designing Developing and Evaluating User Interfaces, Data-Driven Vision and Graphics
- Bachelor of Engineering,** Computer Engineering 2008 – 2012  
Khon Kaen University, Khon Kaen, Thailand,  
*First Class Honors and Gold Medal Award*  
Cumulative GPA : 3.86, (1<sup>st</sup>/649)
- RESEARCH EXPERIENCE**
- Fine grain sketch based image retrieval** May 2017 - current  
Research Intern@Adobe HQ San Jose
- Mentors: Ersin Yumer, Hailin Jin, Jingwan (Cynthia) Lu, Chen Fang
- Sketch-based Image Synthesis [1][2]** Aug 2016 – May 2017  
Georgia Institute of Technology
- Generate realistic image from sketch, scribbler stroke, and texture patch
  - Collaborators: Wenqi Xian, Fisher Yu, James Hays, Jingwan (Cynthia) Lu, Chen Fang
- Sketch2Painting [Patent pending]** May 2016 – Aug 2016  
Research Intern@Adobe HQ San Jose
- Generate a painting of various style based on user sketch
  - Mentors: Jingwan (Cynthia) Lu, Chen Fang
- The Sketchy Database [3]** August 2015 – May 2016  
Georgia Institute of Technology
- Create a database of sketch/image pair and train a cross-domain siamese networks that embed sketches and photographs into a common feature space.
  - Collaborators: James Hays, Nathan Burnell, Cusuh Ham
- Webcam Eyetracking [4]** November 2014 – June 2015  
Brown University
- Real time eye gazing estimation with webcam camera.
  - Collaborators: Jeff Huang, Alexandra Papoutsaki, James Hays

**PUBLICATIONS** [1] **Scribbler: Controlling Deep Image Synthesis with Sketch and Color**  
**Patsorn Sangkloy**, Cynthia Lu, Chen Fang, Fisher Yu, James Hays  
CVPR 2017, scribbler.eye.gatech.edu

[2] **TextureGAN: Controlling Deep Image Synthesis with Texture Patches**  
Wenqi Xian\* **Patsorn Sangkloy\***, Cynthia Lu, Fisher Yu, Chen Fang, James Hays  
(\* co-first authors)  
Under review for Siggraph Asia 2017, <https://arxiv.org/abs/1706.02823>

[3] **The Sketchy Database: Learning to Retrieve Badly Drawn Bunnies**  
**Patsorn Sangkloy**, Nathan Burnell, Cusuh Ham, James Hays  
Siggraph 2016, sketchy.eye.gatech.edu

[4] **WebGazer: Scalable Webcam Eye Tracking Using User Interactions**  
Alexandra Papoutsaki, **Patsorn Sangkloy**, James Laskey, Nediya Daskalova, Jeff Huang, James Hays  
IJCAI 2016

**REVIEWER** Siggraph Asia 2016, Eurographics 2017, Siggraph 2017

**SKILLS** **Programming Language:** Python, Matlab, Lua,  
**Deep learning framework:** caffe, torch, tensorflow

**AWARDS** **Royal Thai Government scholarship** 2013 – 2019  
To pursue MS/PhD degree in Computer Science  
Awarded on competitive basis

- Covers full tuition, monthly allowances, health insurance and other necessary expenses

**CRA-W Grad Cohort 2015 Participation Grant** 10 – 11 April 2015  
San Francisco, CA

**CRA-W Grad Cohort 2014 Participation Grant** 11 – 12 April 2014  
Santa Clara, CA

**Honor Medal** 2012  
**From His Royal Highness Crown Prince Maha Vajiralongkorn**  
Awarded to 37 students in Thailand for achieving highest overall GPA in engineering department of their respective university

**Faculty of Engineering, Khon Kaen University Fellowship** 2008 – 2012  
Awarded to 6 students out of 377 based on entrance exam performance

- Covers 4 years full tuition and stipend

**Excellent Academic Performance Fellowship** 2008 – 2012  
Annual award for GPA greater than 3.7