

Patsorn Sangkloy

Department of Computer Science
Faculty of Science and Technology, Phranakhon Rajabhat University
patsorn.sangkloy@gmail.com

EDUCATION	Doctor of Philosophy, Computer Science Georgia Institute of Technology, Atlanta, GA, Advisor: <i>James Hays</i> PhD Thesis: Controllable Image Synthesis and Image Retrieval	2015 – 2022
	Master of Science, Computer Science Brown University, Providence, RI, Cumulative GPA : 4.00,	2013 – 2015
	Bachelor of Engineering, Computer Engineering Khon Kaen University, Khon Kaen, Thailand, <i>First Class Honors and Gold Medal Award</i> Cumulative GPA : 3.86, (1 st /649)	2008 – 2012
WORK EXPERIENCES	Lecturer Phranakhon Rajabhat University, Bangkok <ul style="list-style-type: none">Teach: AI, ML, HCI, Design and Analysis of Algorithm, English for CS, Computer Architecture, Introduction to Programming	June 2022 - present
	Computer Vision Research Intern Argo AI, Pittsburgh <ul style="list-style-type: none">Project: Argoverse [4]	May 2019 - August 2019 May 2018 - August 2018
	Research Intern Adobe HQ, San Jose <ul style="list-style-type: none">Patent P6553-US-ORG on sketch2painting U.S. Patent No. 10,916,001Project: Scribbler [8], TextureGAN [9]	May 2017 - August 2017 May 2016 - August 2016
	Organizing Committee for the WiCV workshop Women In Computer Vision Workshop In conjunction with ICCV conference 2023 https://sites.google.com/view/wicviccv2023/	3 October, 2023
ACADEMIC ACTIVITIES	Organizing Committee for the 2nd MLRS 2023 Machine Learning Research School in Bangkok, Thailand https://www.mlrs.ai/	2-9 August 2023

Technical Program Committee for SketchDL 2021
Sketch-Oriented Deep Learning (SketchDL) Workshop
In conjunction with CVPR conference 2021
<https://sketchdl.github.io/2021.html/>

19 June 2021

Invited Reviewer

SIGGRAPH ASIA, SIGGRAPH, CHI, CVPR, ECCV, ICCV, ICML, NeurIPS (one of the 400 highest-scoring reviewers in 2019), TPAMI

**MEDIA
COVERAGE
(selected)**

Argoverse [4]

- **Self-driving car startup Argo AI is giving researchers free access to its HD maps**, Kirsten Korosec, techcrunch.com, June 2019
- **Ford's Argo AI will release its HD maps for free to autonomy researchers**, Andrew Krok, cnet.com, June 2019

Scribbler/TextureGAN [8][9]

- **Adobe Scribbler AI can create a realistic color image from a sketch**, Brittany A. Roston, slashgear.com, Oct 2017
- **Adobe's Scribbler AI automatically colorizes any portrait**, Andrew Tarantola, engadget.com, Oct 2017

The Sketchy Database [10]

- **Scan your doodles to find the perfect matching photo online**, Aviva Rutkin, newscientist.com, May 2016
- **A Search Engine That Matches Your Drawings to Photographs Isn't Too Far Off**, Emily Matchar, smithsonian.com, May 2016

WebGazer [11]

- **Web developers, meet WebGazer: software that turns webcams into eye-trackers**, Katherine Noyes, pcworld.com, June 2016
- **Brown boffins brew eye-tracking Javascript**, Richard Chirgwin, theregister.co.uk, June 2016

**AWARDS/
GRANT**

Fundamental Fund research grant 2023
From Thailand Science Research And Innovation via PNRU University
Title: AI-based application for drawing traditional Thai line art
Amount: 206,000 THB

Adobe Research Fellowship 2018

Royal Thai Government scholarship 2013 – 2019

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

CRA-W Grad Cohort 2014 Participation Grant
Santa Clara, CA

11 – 12 April 2014

Honor Medal

2012

From His Royal Highness Crown Prince Maha Vajiralongkorn
Highest GPA in the department from selected universities

Faculty of Engineering, Khon Kaen University Fellowship

2008 – 2012

Covers 4 years full tuition and stipend

Excellent Academic Performance Fellowship

2008 – 2012

Annual award for high GPA

PUBLICATIONS
(selected)

[1] **StyleGAN Salon: Multi-View Latent Optimization for Pose-Invariant Hairstyle Transfer**

Sasikarn Khwanmuang, Pakkapon Phongthawee, [Patsorn Sangkloy](#) and Supasorn Suwajanakorn

[CVPR 2023](#), stylegan-salon.github.io/

[2] **A Sketch Is Worth a Thousand Words: Image Retrieval with Text and Sketch**

[Patsorn Sangkloy](#), Wittawat Jitkrittum, Diyi Yang and James Hays

[ECCV 2022](#), patsorn.me/projects/tsbir/

[3] **CONTROLLABLE CONTENT BASED IMAGE SYNTHESIS AND IMAGE RETRIEVAL**

[Patsorn Sangkloy](#)

[Phd Thesis 2022](#), Georgia Institute of Technology

[4] **Argoverse: 3D Tracking and Forecasting with Rich Maps**

MingFang Chang*, John Lambert*, [Patsorn Sangkloy*](#), Jagjeet Singh*, De Wang, Pete Carr, Simon Lucey, Deva Ramanan and James Hays

[CVPR 2019 \(oral\)](#), argoverse.org

[5] **Kernel Mean Matching for Content Addressability of GANs**

Wittawat Jitkrittum*, [Patsorn Sangkloy*](#), Muhammad Waleed Gondal, Amit Raj, James Hays and Bernhard Scholkopf

[ICML 2019 \(oral\)](#)

[6] **Informative Features for Model Comparison**

Wittawat Jitkrittum, Heishiro Kanagawa, [Patsorn Sangkloy](#), James Hays, Bernhard Scholkopf, Arthur Gretton

[NeurIPS 2018](#)

[7] **SwapNet: Image Based Garment Transfer**

Amit Raj, [Patsorn Sangkloy](#), Huiwen Chang, Jingwan Lu, Duygu Ceylan, James Hays

[ECCV 2018](#), eye.gatech.edu/swapnet

[8] **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

[9] **TextureGAN: Controlling Deep Image Synthesis with Texture Patches**
Wenqi Xian*, [Patsorn Sangkloy](#)*, Cynthia Lu, Fisher Yu, Chen Fang, James Hays
[CVPR 2018 \(spotlight\)](#),

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

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

(* co-first authors)