Patsorn Sangkloy

Authorized to work in the US without visa sponsorship
patsorn.sangkloy@gmail.com

EDUCATION

Doctor of Philosophy, Computer Science · 2015 – 2022
Georgia Institute of Technology, Atlanta, GA,
Advisor: *James Hays*
PhD Thesis: Controllable Image Synthesis and Image Retrieval

Master of Science, Computer Science · 2013 – 2015
Brown University, Providence, RI,
Cumulative GPA : 4.00,

Bachelor of Engineering, Computer Engineering · 2008 – 2012
Khon Kaen University, Khon Kaen, Thailand,
First Class Honors and Gold Medal Award
Cumulative GPA : 3.86, (1st/649)

WORK EXPERIENCES

Postdoctoral Researcher · present
New York University
- at Immersive Computing Lab with Qi Sun

Faculty Member · June 2022 - June 2024
Phranakhon Rajabhat University, Bangkok
- Teach: AI, ML, HCI, Design and Analysis of Algorithm, English for CS, Computer Architecture, Introduction to Programming
- Fulfilling a required appointment for the Royal Thai Government scholarship

Computer Vision Research Intern · May 2019 - August 2019
Argo AI, Pittsburgh · May 2018 - August 2018
- Project: Argoverse [4]

Research Intern · May 2017 - August 2017
Adobe HQ, San Jose · May 2016 - August 2016
- Project: Scribbler [8], TextureGAN [9]
- Patent P6553-US-ORG on sketch2painting U.S. Patent No. 10,916,001

AWARDS/ GRANT	**Fundamental Fund research grant**	2023
	Adobe Research Fellowship	2018
	Royal Thai Government scholarship	$2013 - 2019$
	CRA-W Grad Cohort 2015 Participation Grant San Francisco, CA	$10 - 11$ April 2015
	CRA-W Grad Cohort 2014 Participation Grant Santa Clara, CA	$11 - 12$ April 2014
	Honor Medal From His Royal Highness Crown Prince Maha Vajiralongkorn Highest GPA in the department from selected universities	2012
	Faculty of Engineering, Khon Kaen University Fellowship Covers 4 years full tuition and stipend	$2008 - 2012$
	Excellent Academic Performance Fellowship Annual award for high GPA	$2008 - 2012$

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
- **Georgia Tech Solves Texture Fill Problem with Machine Learning**, Ben Snedeker, rdworldonline.com, July 2018

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

ACADEMIC ACTIVITIES

Organizing Committee for the WiCV workshop   30 September, 2024
Women In Computer Vision Workshop
In conjunction with ECCV conference 2024
`https://sites.google.com/view/wicveccv2024`

Organizing Committee for the WiCV workshop   3 October, 2023
Women In Computer Vision Workshop
In conjunction with ICCV conference 2023
`https://sites.google.com/view/wicviccv2023`

Organizing Committee for the 2nd MLRS 2023   2-9 August 2023
Machine Learning Research School in Bangkok, Thailand
`https://www.mlrs.ai`

Technical Program Committee for SketchDL 2021   19 June 2021
Sketch-Oriented Deep Learning (SketchDL) Workshop
In conjunction with CVPR conference 2021
`https://sketchdl.github.io/2021.html`

Program Committee for IEEE MIPR 2018   10-12 April 2018
IEEE 1st International Conference on
Multimedia Information Processing and Retrieval
`https://cchsu.info/mipr/history/2018/data/index.html`

Program Committee for GroupSight 2017   24 October 2017
Second Workshop on Human Computation for Image and Video Analysis
In conjunction with HCOMP conference 2017
`https://groupsight.github.io`

Program Committee for GroupSight 2016   6 November 2016
Second Workshop on Human Computation for Image and Video Analysis
In conjunction with HCOMP conference 2016
`https://groupsight.github.io`

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

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 Schlkopf
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, Nediyana Daskalova, Jeff Huang, James Hays
IJCAI 2016

(* co-first authors)