

Sonny Chea

Shaquill_chea@student.uml.edu

Professor Haim L.

COMP 4270 Computer Graphics

01-31-2018

Assignment 1

Mastering Sketching: Adversarial Augmentation for Structured Prediction

BibTex:

```
@article{Simo-Serra:2018:MSA:3151031.3132703,  
  author = {Simo-Serra, Edgar and Iizuka, Satoshi and Ishikawa, Hiroshi},  
  title = {Mastering Sketching: Adversarial Augmentation for Structured Prediction},  
  journal = {ACM Trans. Graph.},  
  issue_date = {January 2018},  
  volume = {37},  
  number = {1},  
  month = jan,  
  year = {2018},  
  issn = {0730-0301},  
  pages = {11:1--11:13},  
  articleno = {11},  
  numpages = {13},  
  url = {http://doi.acm.org/10.1145/3132703},  
  doi = {10.1145/3132703},  
  acmid = {3132703},  
  publisher = {ACM},  
  address = {New York, NY, USA},  
  keywords = {Sketch simplification, convolutional neural network, pencil drawing generation},
```

ACM Ref:

Edgar Simo-Serra, Satoshi Iizuka, and Hiroshi Ishikawa. 2018. Mastering Sketching: Adversarial Augmentation for Structured Prediction. *ACM Trans. Graph.* 37, 1, Article 11 (January 2018), 13 pages. DOI: <https://doi.org/10.1145/3132703>

DrawCAD: mouse-sketch-based engineering drawing

BibTex:

```
@inproceedings{Ranade:2013:DME:2525194.2525303,  
  author = {Ranade, Abhiram and Sarade, Shripad},  
  title = {DrawCAD: Mouse-sketch-based Engineering Drawing},  
  booktitle = {Proceedings of the 11th Asia Pacific Conference on Computer Human Interaction},  
  series = {APCHI '13},
```

```

year = {2013},
isbn = {978-1-4503-2253-9},
location = {Bangalore, India},
pages = {344--353},
numpages = {10},
url = {http://doi.acm.org/10.1145/2525194.2525303},
doi = {10.1145/2525194.2525303},
acmid = {2525303},
publisher = {ACM},
address = {New York, NY, USA},
keywords = {constraints, engineering drawing, sketching},
}

```

ACM Ref:

Abhiram Ranade and Shripad Sarade. 2013. DrawCAD: mouse-sketch-based engineering drawing. In *Proceedings of the 11th Asia Pacific Conference on Computer Human Interaction (APCHI '13)*. ACM, New York, NY, USA, 344-353. DOI: <https://doi.org/10.1145/2525194.2525303>

3D Model Retrieval Based on Hand Drawn Sketches Using LDA Model

BibTex:

```

@INPROCEEDINGS{8039119,
author={H. Lei and G. Luo and Y. Li and S. Lin},
booktitle={2016 6th International Conference on Digital Home (ICDH)},
title={3D Model Retrieval Based on Hand Drawn Sketches Using LDA Model},
year={2016},
volume={},
number={},
pages={261-266},
keywords={Internet;feature extraction;image retrieval;solid modelling;3D model
retrieval;Internet;LDA model;hand drawn sketch;low-level feature extraction;query sketch;visual
words;Computational modeling;Feature extraction;Shape;Solid modeling;Three-dimensional
displays;Two dimensional displays;Visualization;3D model retrieval;LDA model;Topics
distribution;Visual words},
doi={10.1109/ICDH.2016.060},
ISSN={},
month={Dec},}

```

ACM Ref:

H. Lei, G. Luo, Y. Li and S. Lin, "3D Model Retrieval Based on Hand Drawn Sketches Using LDA Model," *2016 6th International Conference on Digital Home (ICDH)*, Guangzhou, 2016, pp. 261-266.
doi: 10.1109/ICDH.2016.060

keywords: {Internet;feature extraction;image retrieval;solid modelling;3D model retrieval;Internet;LDA model;hand drawn sketch;low-level feature extraction;query sketch;visual words;Computational modeling;Feature extraction;Shape;Solid modeling;Three-dimensional displays;Two dimensional displays;Visualization;3D model retrieval;LDA model;Topics distribution;Visual words},

URL: <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=8039119&isnumber=8038940>

DrawFromDrawings: 2D Drawing Assistance via Stroke Interpolation with a Sketch Database

BibTex:

@ARTICLE{7452668,
author={Y. Matsui and T. Shiratori and K. Aizawa},
journal={IEEE Transactions on Visualization and Computer Graphics},
title={DrawFromDrawings: 2D Drawing Assistance via Stroke Interpolation with a Sketch Database},
year={2017},
volume={23},
number={7},
pages={1852-1862},
keywords={computer graphics;2D drawing assistance;ALAP stroke segments;DrawFromDrawings;as-long-as-possible stroke segments;deformation feedback;interactive drawing system;regions of interest;sketch composition;sketch database;sketch image database;stroke interpolation;stroke-level interpolation;suggestive feedback;Animation;Feature extraction;Interpolation;Shape;Visual databases;Visualization;2D shape interpolation;interactive drawing},
doi={10.1109/TVCG.2016.2554113},
ISSN={1077-2626},
month={July},}

ACM Ref:

Y. Matsui, T. Shiratori and K. Aizawa, "DrawFromDrawings: 2D Drawing Assistance via Stroke Interpolation with a Sketch Database," in *IEEE Transactions on Visualization and Computer Graphics*, vol. 23, no. 7, pp. 1852-1862, July 1 2017.

doi: 10.1109/TVCG.2016.2554113

keywords: {computer graphics;2D drawing assistance;ALAP stroke segments;DrawFromDrawings;as-long-as-possible stroke segments;deformation feedback;interactive drawing system;regions of interest;sketch composition;sketch database;sketch image database;stroke interpolation;stroke-level interpolation;suggestive feedback;Animation;Feature extraction;Interpolation;Shape;Visual databases;Visualization;2D shape interpolation;interactive drawing},

URL: <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=7452668&isnumber=7934157>