

RESEARCH INTEREST	Computer Vision, Machine Learning, Deep Learning	
SKILLS	<b>Efficient:</b> Deep learning (Tensorflow, Torch, Caffe), Python, C++, Lua, Matlab <b>Familiar:</b> Java, C#, PHP, MySQL	
EDUCATION	<b>Michigan State University</b> , East Lansing, MI Ph.D., Computer Science • Advisors: Prof. Xiaoming Liu • GPA: 3.6/4.0 <b>Michigan State University</b> , East Lansing, MI B.S., Computer Science • GPA: 4.0/4.0	<b>Expected in May 2019</b> <b>May 2015</b>
EXPERIENCE	<b>Graduate Research Assistant</b> Computer Vision Lab, East Lansing, MI • Developed a novel training approach to learn powerful nonlinear 3D face morphable model leveraging large collections of 2D images • Developed a generative model jointly performs representation learning and image synthesis for pose-invariant face recognition • Worked in “Learning to Fuse Information with Missing Modality” project: designed and developed a suite of computer vision and machine learning tools that can learn to fuse information from different sensors when a significant portion of training data has missing modalities <b>Summer Research Assistant</b> NEC Labs America, Inc., Cupertino, CA • Worked on the problem of domain adaptation for fine-grained object recognition. • Proposed a semi-supervised learning approach to domain adversarial training. • Utilized domain semi-supervised learning in a domain adversarial neural network to deal with specific variations: robust appearance flow for viewpoint, CycleGAN image translation for low-level statistic. <b>Software Engineering Intern</b> Meijer, Inc., East Lansing, MI • Worked in a team of four students in Michigan State University senior capstone course • Designed and implemented “Product Availability Check using Glassware” • Created a Google Glass application that can scan a barcode for Universal Product Code and connect to Microsoft Azure Mobile Service to retrieve data using Java, SQLite <b>Undergraduate Research Assistant</b> 3D Vision Lab, East Lansing, MI • Engineering Summer Undergraduate Research Experience, mentored by Dr. Daniel Morris • Developed a medical application to tracking user motions and extracting tremors frequency • Presented a research poster “Hand and arm tremors detection using Kinect sensor” at the Mid-Michigan Symposium for Undergraduate Research Experiences, July 23, 2014 <b>Tutor</b> MSU College of Engineering, East Lansing, MI • Assisted engineering students in grasping the concepts of engineering classes by going over lecture notes and providing support on homework problems	<b>Aug 2015 - present</b> <b>May 2017 - Aug 2017</b> <b>Jan 2015 - May 2015</b> <b>Jun 2014 - May 2015</b> <b>Aug 2013 - May 2015</b>
HONORS AND AWARDS	Michigan State University Board of Trustees Award: <i>Graduating seniors having the highest cumulative grade-points</i> First Prize Microsoft Coding Competition at MSU First Prize in Herzog Mathematics Competition Odon Vallet Scholarship for outstanding students Second Prize in Vietnamese National Mathematics Olympiad	<b>Apr 2015</b> <b>Nov 2013, Oct 2014</b> <b>Dec 2013, Dec 2014</b> <b>Oct 2011</b> <b>Mar 2010</b>

## PUBLICATIONS

### Conference Papers

- **Luan Tran**, Xiaoming Liu, “Nonlinear 3D Face Morphable Model,” in *Proceeding of IEEE International Conference on Computer Vision and Pattern Recognition (CVPR) 2017*, Salt Lake City, Utah, June, 2018. (**Spotlight presentation, Acceptance rate 8.3%**) [PDF](#)
- **Luan Tran**, Xi Yin, Xiaoming Liu, “Disentangled Representation Learning GAN for Pose-Invariant Face Recognition,” in *Proceeding of IEEE International Conference on Computer Vision and Pattern Recognition (CVPR) 2017*, Honolulu, Hawaii, July, 2017. (**Oral presentation, Acceptance rate 2.7%**) [PDF](#)
- **Luan Tran**, Xiaoming Liu, Jiayu Zhou, and Rong Jin, “Missing Modalities Imputation via Cascaded Residual Autoencoder,” in *Proceeding of IEEE International Conference on Computer Vision and Pattern Recognition (CVPR) 2017*, Honolulu, Hawaii, July, 2017. [PDF](#)

### Papers Under Review

- **Luan Tran**, Xi Yin, Xiaoming Liu, “Representation Learning by Rotating Your Faces ,” under review in *IEEE Transactions on Pattern Analysis and Machine Intelligence*, May 2017. [PDF](#)
- **Luan Tran**, Kihyuk Sohn, Xiang Yu, Xiaoming Liu and Manmohan Chandraker, “Joint Pixel and Feature-level Domain Adaptation in the Wild,” under review in *European Conference on Computer Vision (ECCV) 2018* [PDF](#)
- Bangjie Yin, **Luan Tran**, Haoxiang Li, Xiaohui Shen, Xiaoming Liu, “Towards Interpretable Face Recognition,” under review in *European Conference on Computer Vision (ECCV) 2018* [PDF](#)

## PATENTS

- Xiaoming Liu, **Luan Tran**, Xi Yin. Disentangled Representation Learning GAN for Pose-Invariant Face Recognition, U.S. Patent Application No. 62/560001. (undergoing licensing negotiation)

## INVITED TALKS

- Apr 2017: Disentangled Representation Learning GAN for Pose-Invariant Face Recognition. Midwest vision workshop, Chicago IL

## REFERENCES

Dr. Xiaoming Liu, Assistant Professor, liuxm@cse.msu.edu, (517) 355-2359  
Dr. Daniel Morris, Associate Professor, dmorris@msu.edu, (517) 432-4427  
Dr. Jiayu Zhou, Assistant Professor, jiayuz@msu.edu, (517) 353-6484