Qi Li

Computer Science \diamond Auburn University, AL, USA email: qili@auburn.edu \diamond cell: +1.334.524.1753

Biography: Qi is a current Ph.D. student at Auburn University. His research focuses on Deep Learning, specifically, generative models and the robustness. He has published papers on main conferences and won a Best Application Paper Honorable Mention (ACCV 2020). Qi is proficient in Python, PyTorch, BASH and deep neural network visualization.

EDUCATION

Auburn University, Auburn, AL

Ph.D. in Computer Science — Deep Learning Advisor: Anh Nguyen

GPA: 3.86/4.0

Auburn University, Auburn, AL Aug 2017 - present

M.S. in Computer Science and Software Engineering Advisor: Anh Nguyen

GPA: 4.0/4.0

Southeast University, Nanjing, China Sep 2002 - Jun 2006

B.S. in Computer Science and Software Engineering

PUBLICATIONS

https://scholar.google.com/citations?user=wbv5apcAAAAJ

Research papers

- · Q. Li, L. Mai, M. A. Alcorn, A. Nguyen (2020). A cost-effective method for improving and re-purposing large, pre-trained GANs by fine-tuning their class-embeddings. Asia Conference on Computer Vision (ACCV). Huawei Best Application Paper Honorable Mention (acceptance rate: 6/768 ≈ 0.8%) [pdf] [code]
- · M. A. Alcorn, Q. Li, Z. Gong, C. Wang, L. Mai, W. Ku, A. Nguyen (2019). Strike (with) a Pose: Neural Networks Are Easily Fooled by Strange Poses of Familiar Objects. *Computer Vision and Pattern Recognition (CVPR)*. (acceptance rate: 1, 294/5, 160 = 25.2%) [pdf] [code]

WORK EXPERIENCE

Auburn University

Aug 2018 - present

Auburn, AL

Dec 2019 - present

Graduate Research and Teaching Assistant

- · Research on improving the samples diversity of BigGAN
- · Research on generating the adversarial examples by changing the poses of objects in a 3D renderer.
- · Assistant the course of Formal Languages and Deep Learning instructed by Dr. Nguyen.

Tianjin Customs

Jul 2006 - Jun 2017

Senior Officer

Tianjin, China

- · Developed software and web sites including: Airport Customs Information Net, Statistical Passenger Information Check, and Courier Duty Assignment System.
- · Worked in departments successively including Airport check, Office, International Express Regulations
- \cdot Edited Customs Daily News in the Office of the General Administration of Customs from 07/2009 to 02/2010

INTERNSHIP

Shanghai Alphatek Company

Jul 2005 - Mar 2006 Shanghai, China

Technical Consultant

· Oracle ERP system development based on custom requirements.

SELECTED PRESS COVERAGE

- 2019: Nature. Why deep-learning AIs are so easy to fool
- 2019: New Scientist. The best image-recognition AIs are fooled by slightly rotated images
- 2019: Communications of ACM. March 2019 news.
- 2018: ZDNet. Google's image recognition AI fooled by new trickstext
- 2018: Nautilus. Why Robot Brains Need Symbols
- 2018: Gizmodo. Google's 'Inception' Neural Network Tricked By Images Resembling Bad Video Games
- 2018: Gary Marcus. The deepest problem with deep learning

PROJECTS

Improve a state of the art image-generator BigGAN

Arp 2019 - Nov 2019

· Improve the sample diversity of a pre-trained class-conditional generator by modifying its class embeddings in the direction of maximizing the log probability outputs of a classifier pre-trained on the same dataset.

A simple GUI tool for generating adversarial poses of objects.

Sep 2018 - Nov 2018

- · Add different Deep Learning models to the GUI and implement the prediction functions.
- · https://github.com/airalcorn2/strike-with-a-pose

AWARDS

- 2020: Huawei Best Application Paper Honorable Mention at ACCV
- 2020: Outstanding Master Student Award
- 2019: Research assistantship for the work funded by joint NSF and Adobe Research: \$4,500
- 2018: Research assistantship for the work funded by NSF: \$4,500
- 2007, 2011, 2012, 2013, 2014, 2015, 2016: Annual Assessment grading Excellent (Top 5-10%)
- 2008, 2013, 2016: Award of merit citation of third class

SERVICES AND ACTIVITIES

Volunteer

- · 2019 Computer Vision and Pattern Recognition (CVPR) in Long beach
- · 2019 BEST Robotics competition in Auburn
- · 2017-2019 E-day in Auburn
- · 2010 Asian Games Volunteer in Guangzhou, China
- · 2008 Summer Davos in Tianjin, China
- · 2008 Beijing Olympic Games in Tianjin, China

Services

· 2019 Ambassador, Council of Engineering Graduate Students (CEGS)

 \cdot 2017-2018 Vice President, Chinese Student and Scholar Association

LANGUAGES

Chinese Native speaker

English Fluent