HUBERT LIN

hubert@cs.cornell.edu | www.cs.cornell.edu/~hubert

EDUCATION

Cornell University, PhD — Aug 2016 – Present
Computer Science

University of Toronto, HBSc — June 2016
Major in Computer Science, Major in Physics, Minor in Mathematics | CGPA: 3.99 / 4.00

PUBLICATIONS

See website: www.cs.cornell.edu/~hubert

- **Materials In Paintings (MIP): An interdisciplinary dataset for perception, art history, and computer vision.**
  - Van Zuijlen, M.; Lin, H.; Bala, K.; Pont, S.C.; Wijntes, M.W.A. PLOS One 2021.
- **AutoPhoto: Aesthetic Photo Capture using Reinforcement Learning.**
  - Al-Zayer, H.; Lin, H.; Bala, K. IROS 2021.
- **What Can Style Transfer and Paintings Do For Model Robustness?.**
  - Lin, H.; Van Zuijlen, M.; Wijntes, M.W.A.; Pont, S.C.; Bala, K. CVPR 2021.
- **Insights from a Large-Scale Database of Material Depictions in Paintings.**
  - Lin, H.; Van Zuijlen, M.; Wijntes, M.W.A.; Pont, S.C.; Bala, K. FAPER ICPR 2020.
- **Silva: Interactively Assessing Machine Learning Fairness Using Causality.**
  - Yan, J.N.; Gu, Z.; Lin, H.; Rzeszotarski, J; CHI 2020.
- **DeepSemanticHPPC: Hypothesis-based Planning over Uncertain Semantic Point Clouds.**
  - Han, Y.*; Lin, H.*; Banfi, J.*; Bala, K.; Campbell, M. ICRA 2020.
- **Block Annotation: Better Image Annotation with Sub-Image Decomposition.**
  - Lin, H.; Upchurch, P.; Bala, K. ICCV 2019.
- **Learning Material-Aware Local Descriptors for 3D Shapes.**
  - Lin, H.; Averkiou, M.; Kalogerakis, E.; Kovacs, B.; Ranade, S.; Kim, V. G.; Chaudhuri, S.; Bala, K. 3DV 2018.
- **Identifying and avoiding confusion in dialogues of people with Alzheimer's Disease.**
  - Chinaei, H.; Chan Currie, L.; Danks, A.; Lin, H.; Mehta, T.; Rudzicz, F. Computational Linguistics 2017.

PRESENTATIONS

CVPR 2021	Virtual
V-VSS 2021	Virtual
ICCP Posters 2021	Virtual
The Skin of Things 2021	Virtual
FAPER ICPR 2020	Virtual
ICRA 2020	Virtual
Cornell Graphics / Vision Retreat Winter 2020	Cornell University
ICCV 2019	Seoul, Korea
Cornell Graphics / Vision Seminar Fall 2018	Cornell University
3DV 2018	Verona, Italy
DCS Undergraduate Student Research Program 2015	University of Toronto
Canadian Undergraduate Physics Conference 2014	Queen's University

PROFESSIONAL EXPERIENCE

Research Intern

Waymo — May 2021 – Sept 2021

- Self-supervised 2D camera detection from camera+lidar videos

Research Assistant

Cornell University — Jan 2017 – Present

- Learning robust visual recognition models from paintings
- Visual perception for robust autonomous navigation
- Image annotation

University of Toronto — May 2015 – Dec 2015

- Noise models for 3D protein reconstruction from electron cryomicroscopy images
- Guiding cognitively-impaired persons through a picture-description task with a communicative robot

University of Waterloo May 2014 – Aug 2014
- Closing the gap in quantum bit error rate for secure key generation in the six-state QKD protocol

Teaching Assistant
CS2112: Honors Object Oriented Programming Sept 2016 – June 2017
CS2800: Discrete Structures
CSC108: Introduction to Computer Programming Sept 2014 – Dec 2014

HONORS AND AWARDS

- NSERC Postgraduate Scholarship D 2018
  - CAD$63,000
- NSERC Canada Graduate Scholarship M 2016
  - Awarded and declined
- NSERC Undergraduate Student Research Award 2015
  - Computer Science, University of Toronto
  - CAD$6,000
- NSERC Undergraduate Student Research Award 2014
  - Physics, University of Waterloo
  - CAD$8,000
- Course Scholarships (various), University of Toronto
  - CAD$28,967
- Top 15 Junior Canadian Computing Competition 2011

COMMUNITY SERVICE

- Reviewer: CVPR, ICCV, 3DV, IJCAI, ICRA, AURO, SIGGRAPH
- Expanding Your Horizons at Cornell, Workshop Leader, 2017
- University of Toronto, University Physics Competition Preparation Session Speaker, 2015

SKILLS

Proficient with: Python, PyTorch, Tensorflow, Vim, LaTeX, Git
Working familiarity with: C/C++, Java, Matlab, AWS EC2, Caffe

Work Authorization: US Citizen