

# 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](http://www.cs.cornell.edu/~hubert)

- **What Can Style Transfer and Paintings Do For Model Robustness?**
    - [Lin, H.](#); Van Zuijlen, M.; Wijntes, M.W.A.; Pont, S.C.; Bala, K. Preprint.
  - **AutoPhoto: Aesthetic Photo Capture using Reinforcement Learning.**
    - Al-Zayer, H.; [Lin, H.](#); Bala, K. Preprint.
  - **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.
  - **A Database of Painterly Material Depictions.**
    - Van Zuijlen, M.; [Lin, H.](#); Bala, K.; Pont, S.C.; Wijntes, M.W.A. V-VSS 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.**
    - [Lin, H.\\*](#); Han, Y.\*; 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

ICRA 2020 (virtual poster) 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 Assistant

Cornell University Jan 2017 – Present

- Human-centric priors for visual recognition
- 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 (various venues)
  - 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