LYNDON CHAN

☎ 647-330-1294 (mobile) | ✉ lyndon.chan@mail.utoronto.ca
🌐 www.comm.utoronto.ca/~chanlynd

EDUCATION

M.A.Sc., Electrical Engineering (Communications Group) 2017-present
University of Toronto Toronto, Ontario, CANADA

ADVISORS: Drs. Konstantinos Plataniotis & Parham Aarabi
RESEARCH AREAS: Image Processing, Computer Vision, Image Recognition, Machine Learning

B.A.Sc., Electrical Engineering 2012-2017
University of Toronto Toronto, Ontario, CANADA
FOCUS AREAS: "Control, Communications & Signal Processing", "Analog & Digital Electronics", "Software"
CAPSTONE PROJECT: *DARI: Depth-variable Augmented Reality Interface*

- Cumulative GPA: **3.64 / 4.0**
- Sessional GPA (Winter 2017): **3.73 / 4.0** (ranked 17th of 129)
- Dean's List (Fall 2012-13, Fall & Winter 2013-17)
- 2017 Gordon Slemon Design Award (worth $1,000 CAD) for Capstone Project

SKILLS

- **Programming Languages (most to least proficient):** MATLAB, Python, C/C++, Java, Ruby, R
- **Software:** LaTeX, Windows Shell, Wiki Markup, FFMPEG, TensorFlow
- **Languages:** English (native), Cantonese (near-native), Mandarin (intermediate), German (basic), French (basic)

RESEARCH

Undergraduate Student Research Assistant May 2017-Aug. 2017
University of Toronto (Multimedia Lab) Toronto, Ontario, CANADA
SUPERVISORS: Mahdi S. Hosseini, Dr. Konstantinos Plataniotis

- Devised novel method for image recognition using a differential convolutional kernel with optimal frequency response characteristics
- Focused application on texture images and digital pathology images using tissue slide data provided by research partners in Huron Digital Pathology
- Funded by NSERC Undergraduate Student Research Awards (worth $4,500 CAD)

Interim Engineering Intern May 2015-Aug. 2016
Qualcomm Canada Markham, Ontario, CANADA

- DVP/HQV System Team
  - Built a regression test framework for the VPP (Video Post-Processing) video enhancement library, wrote dynamic test suite to run tests automatically and flexibly
- DVP/HQV Algorithm Team
  - Built a regression test framework for the HQV (Hollywood Quality Video) video enhancement library, evaluated enhancement quality
  - Developed testing framework for optical flow, cadence detection, and video deinterlacing
  - Installed a camera calibration lab and conducted testing of 360-degree image stitching
- VESA DSC Proposal Team
  - Built a regression test framework for the VESA ADSC (Advanced Display Stream Compression) image compression standards
  - Conducted subjective flicker perception testing with Centre for Vision Research in York University
- Automotive Team
  - Worked on building LACES (Laboratory Automation Control and Experimentation Software), an automated mechanical testbed for mobile cameras
- Qualcomm HackMobile
  - Competed in Qualcomm HackMobile hackathons in June 2015 and 2016 at San Diego (worked with Arduino UNO and Qualcomm TurtleBot)

Undergraduate Visiting Research Intern   Jun.-Aug. 2014
Hong Kong University of Science and Technology (Human Language Technology Centre)
Clear Water Bay, New Territories, HONG KONG
Supervisors: SU Dan, Dr. Pascale Fung

- Two projects: (1) cultural analysis of profile answers on dating website OkCupid and (2) song popularity analysis on microblogging platform Sina Weibo
- Independently learned basic machine learning and data mining fundamentals
- Funded by University of Toronto Centre for International Experience (CIE) Summer Research Award (worth $3,250 CAD)

High School Summer Research Assistant   Jul.-Aug. 2012
Sunnybrook Research Institute (Focused Ultrasound Group)   Toronto, Ontario, CANADA
Supervisors: Mathew Carias, Dr. Kullervo Hynynen

- Designed optimal ultrasound transducer prototype for therapeutic cardiac ablation
- Built nine transducer catheters and quantified their performances by destructive testing
- Funded by SRI High School Summer Research Assistant Award

Teaching

Teaching Assistant (Undergraduate Courses)
ECE462: Multimedia Systems   Jan.-Apr. 2018
University of Toronto   Toronto, Ontario, CANADA
Instructor: Dr. Dimitrios Hatzinakos

- Designed eight lab assignments and quizzes in digital image processing
- Marked student assessments, compiled scripted reports of student assessments for the CEAB