K. L. Barry**Fung**

medical imaging researcher

about

barry@klfung.ca
http://www.klfung.ca

languages

english
limited proficiency in
cantonese and french

programming

Python, C/C++/C#
MATLAB/Octave
Verilog
Bash, Git
SQL, Flask, Jekyll

technical skills

optical design
circuit design
FPGA programming
PCB layout
embedded systems
web design

hobbies

classical vocal music
piano
biking

interests

medical imaging, MRI, projection x-ray imaging, inverse problem in imaging, biophotonics, machine learning

education

since 08/17 **JtPh.D.** student in Bioengineering — UCSF/UC Berkeley, California, USA
Biomedical Imaging & Instrumentation

09/12–06/17 **B.A.Sc. with High Honours** — University of Toronto, Toronto, Canada
Engineering Science, Major in Engineering Physics
Monte Carlo simulation of polarization-sensitive second-harmonic generation
Supervised by: Dr. I. A. Vitkin

09/08–06/12 **Ontario Scholar** — Markham District High School, Markham, Canada
Advanced Placement in Physics, Biology and Calculus

experience (research)

06/16-08/17 **XLV Diagnostics, Toronto, Canada** — Engineering Internship
All-purpose device engineering intern

05/16-04/17 **University Health Network, Toronto, Canada** — Undergraduate Research
MC Simulation of p-SHG

05/15-05/16 **XLV Diagnostics, Toronto, Canada** — Engineering Internship
All-purpose device engineering intern

05/14-08/14 **Baycrest Health Sciences, Toronto, Canada** — Undergraduate Research
Algorithms for functional connectivity in fMRI datasets

experience (misc)

05/16-04/17 **IEEE U of T Student Branch** — Director of Events, Electronics Chapter
Directed and assisted in organization of electronics education events

05/16-04/17 **Hart House Chorus** — Vice Executive Secretary and Librarian
Organized events, and found/arranged music for performances

09/16-12/16 **Division of Engineering Science** — Teaching Assistant, ESC103H1
Led 2-hour linear algebra tutorials, rated 6.4/7 by students

07/14-11/16 **Engineering Science Discipline Club** — Webmaster
Maintained website and handled registration systems for events

posters/talks

08/2016 **Monte Carlo simulation of second-harmonic polarimetry**
K.L.B. Fung, M. Samim and I. A. Vitkin
Undergraduate Engineering Research Day and Medical Biophysics Summer Student Day

08/2014 **Assessing Test-Retest Stability of Resting-state Functional MRI Metrics**
K.L.B. Fung and J. J. Chen
Medical Biophysics Summer Student Day

honours

12/12-06/17 **Dean's List** U of T Faculty of Applied Science and Engineering
Awarded for academic achievement

08/2016 **2nd Place, Bioelectricity** UnERD 2016, Toronto
Awarded for research in MC simulation of p-SHG

08/2016 **2nd Place** U of T MBP Summer Student Conference
Awarded for research in MC simulation of p-SHG

05/2016 **FASE Undergraduate Research Fellowship** U of T Engineering
Awarded for research in MC simulation of p-SHG

05/2015 **Engineering Society Award** U of T Faculty of Applied Sciences and Engineering
Awarded for academic and extracurricular achievement

05/2015 **Rita K Teetzel In Course Scholarship** U of T Engineering
Awarded for academic achievement

05/2014 **Jack Gorrie Memorial Undergraduate Scholarship** U of T Engineering
Awarded for academic achievement

05/2014 **Undergraduate Student Research Award** NSERC
National research grant for algorithm development at Baycrest

05/2012 **President's Entrance Scholarship** University of Toronto
Entrance scholarship based on academic merit

04/2012 **Grade 10 Piano** Royal Conservatory of Music
National title of achievement in theoretical and practical piano examinations