Peiqi Wang

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https://github.com/tt6746690

Education

University of Toronto — Sep 2014 - May 2019
Honours BSc in Computer Science & Math (minor)
Cumulative GPA: 3.99 / 4.0
Relevant Courses: Geometry Processing, Advanced Algorithm, Statistical Methods for Data Mining and Machine Learning, Neural Networks, Programming Language, Compilers and Interpreters, Operating System, Multivariable Calculus, Topology, Probability and Statistics

Experience

Dynamic Graphics Project — September 2018 - Now
Senior Thesis with Prof Kyros Kutulakos — University of Toronto
Developing learning based upsampling algorithm for structured light cameras

Capstone Project — September 2018 - Now
project student with Prof Alec Jacobson — University of Toronto
Developed method to reduce 3D printing support structures via skinning deformation. abstract

Numerical Analysis and Scientific Computing Group — May 2018 - November 2018
Research Student with Prof. Kenneth Jackson — University of Toronto
Investigated an inconsistency in the observed behavior of a two-level importance sampling algorithm in simulating portfolio credit risk under the Gaussian Copula model. Tested hypotheses by implementing Monte Carlo methods and variance reduction techniques in Julia.

Deep Genomics — September 2017 - September 2018
Research Student with Prof. Brendan Frey & Summer Research Intern — Toronto, ON
Extended a C++ library for genomic analysis. Benchmarked and created a fast tool for approximating energy based RNA-RNA interaction predictors. Improved a key alternative splicing model by experimenting with regularizers and recurrent networks.

Peter Gilgan Centre for Research and Learning — September 2016 - September 2017
Research Student with Prof. Michael Brudno — Toronto, ON
Developed software for investigating expression pattern in human tissues.

Department of Medical Biophysics — September 2015 - September 2016
Research Student with Prof. Susan Done — Toronto, ON
Quantified consistency and reproducibility of digital image analysis techniques by applying statistical tests, specifically Cohen's kappa, intraclass correlation. Assessed the role of PITPNC1 in the development of a type of aggressive breast cancer.

Presentations

Undergraduate Summer Research Program (UGSRP), Toronto, ON — July 2018
Presentation on *Monte Carlo simulation for portfolio credit risk*

Research Opportunities Program, Toronto, ON — August 2016
Poster presentation on *Ki-67 Digital Image Analysis: Reliability and Variability*

American Association for Cancer Research, New Orleans, LA — April 2016
Poster presentation on *Amplification of PITPNC1 affects breast cancer progression*

Skills

Programming Languages: C++, Python, Julia, Typescript, R, Racket, MATLAB
Tools: TensorFlow, PyTorch, Numpy
Languages: English, Mandarin

Awards

Dean's List	2015,2016,2017,2018
Joseph Alfred Whealey Incourse Scholarship	2017
Lawrence And Sharen Ho International Scholarship Iii	2017
The Kathryn Anne Radford Scholarships	2016
Undergraduate Research Opportunities Program UROP	2016
The Milne Research Award	2016
Adel S Sedra Undergraduate Scholarship In Mathematics	2015
University of Toronto Scholars Awards	2014

Extracurriculars

Internationally Genetically Modified Machines (iGEM)
University College Dragon Boat Team

Other Interests

Film and Digital Photography

A Quote I liked

You've got to think about big things
while you're doing small things
so that all the small things
go in the right direction
– Alvin Toffler