

Lawrence Pang

lawrencepang36@gmail.com | 647.471.1486

LINKS

Github: [lpang36](#)
Website: [Lawrence Pang](#)
LinkedIn: [Lawrence Pang](#)

EDUCATION

UNIVERSITY OF WATERLOO

HONOURS COMPUTER ENGINEERING,
Co-OP

Expected Jul 2022 | Waterloo, ON

Cum. GPA: N/A

MARC GARNEAU C.I.

TOPS PROGRAM

Jul 2017 | Toronto, ON

Honour Roll (All Semesters)

GPA: 97.0 / 100

SAT: 2400/2400

SKILLS

Object-Oriented Programming
Functional Programming
Web Development
Machine Learning
Data Science
Algorithms and Data Structures
Image Processing

TECHNOLOGIES

LANGUAGES

Fluent

Java • JavaScript • HTML5 • CSS3 •

Python • Matlab • C++ • Arduino

Familiar

VisualBasic • Swift • Maple • Processing •

Scala • R • SQL • Bash • \LaTeX

FRAMEWORKS AND TOOLS

Git • Django • Node.js • Express.js •

MongoDB • Bootstrap • Apache Spark •

JQuery

COURSEWORK

Algorithms and Data Structures

Princeton

Big Data With Scala and Spark

EPF Lausanne

Machine Learning

Stanford

Data Analysis With R

Facebook

EXPERIENCE

SUNNYBROOK RESEARCH INSTITUTE | PROGRAMMING INTERN

Jul 2016 – Sep 2016 | Toronto, ON

- Worked under Dr. Kullervo Hynynen in the Focused Ultrasound Lab
- Created Matlab program to automatically detect anatomical structures in MRI images of the uterus for treatment of uterine fibroids
- Greatly increased efficiency of segmentation process from several hours to about 15 mins, with clinical applications

INTERNATIONAL LANGUAGES PROGRAM | OFFICE ASSISTANT

Sep 2013 – Jun 2017 | Markham, ON

- Automated creation of educational materials in VisualBasic
- Acted as liaison between office administration, teachers, and students

PROJECTS

CHROME TAB PREDICTOR | JAVASCRIPT

- Chrome extension using machine learning to predict and open tabs
- Currently in development, working in a team of two

SOCCER SENTIMETER | PYTHON/DJANGO

- Created dynamic website tracking Twitter sentiment of soccer teams
- Used natural language processing and various APIs (Google Maps, Twitter, Highcharts, MediaWiki, TextBlob)
- Created front-end design and generated an SQLite3 database

WORM COLONY SIMULATION | JAVA

- Simulated neural evolution of a *C. elegans* colony using biologically plausible mechanisms
- Novel approach in combining synaptic time-dependent plasticity and evolutionary algorithm
- Demonstrated ability to differentiate and associate environmental stimuli

GRAPHING CALCULATOR | JAVA

- Created a graphing calculator with calculus and statistical tools
- Implemented reverse polish notation and Shunting-Yard algorithm

AWARDS

2017 Silver Medal

2017 National Champion

2016 International

2016 International

2015 First

Don Mills Programming Gala

Canadian Senior Mathematics Contest

International Computational Linguistics Olympiad

Invited to International Astrophysics Olympiad

John Dobson Entrepreneurship Cup

EXTRACURRICULARS

2014-2017 The Reckoner (school newspaper), Editorial Manager

2013-2017 President, Math Club

2012-2017 President, Debate Team

2014-2016 Foundation for Student Science and Technology

2013-2016 Youth Environmental Network of York Region