Lawrence Pang

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LINKS

Github: lpang36
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 • 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
Intermediate C++
Microsoft

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 2

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 diffrentiate 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	Don Mills Programming Gala
2017	National Champion	Canadian Senior Mathematics Contest
2016	International	International Computational Linguistics Olympiad
2016	International	Invited to International Astrophysics Olympiad
2015	First	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