

Lawrence Pang

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LINKS

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

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

TECHNOLOGIES

LANGUAGES

Java • Python • Matlab • C++ •
JavaScript • HTML5 • CSS3 • Arduino •
Scala • R • VisualBasic • Swift • SQL •
Bash • \LaTeX

FRAMEWORKS AND TOOLS

Git • TensorFlow • Django • Node •
Express • MongoDB • Bootstrap •
Apache Spark • JQuery

COURSEWORK

Algorithms and Data Structures

Princeton

Big Data With Scala and Spark

EPF Lausanne

Machine Learning

Stanford

Deep Learning

Google

Data Analysis With R

Facebook

EXPERIENCE

SUNNYBROOK RESEARCH INSTITUTE | SOFTWARE INTERN

Jul 2016 – Sep 2016 | Toronto, ON

- Created Matlab program to automatically detect anatomical structures in MRI images
- Used image morphology techniques and unsupervised learning algorithms
- 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, reducing time spent by 90%
- 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 and players
- Used natural language processing and various APIs (Google Maps, Twitter, Highcharts, MediaWiki, TextBlob)
- Created clean, responsive design and generated an SQLite3 database

WORM COLONY SIMULATION | JAVA

- Simulated neural evolution with a novel approach combining synaptic time-dependent plasticity and evolutionary algorithm
- Demonstrated ability to differentiate and associate environmental stimuli

PERSONAL WEBSITE | NODE/EXPRESS

- Created personal website without any use of templates, in Node and Express
- Dynamic and responsively designed, stored data using MongoDB

GRAPHING CALCULATOR | JAVA

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

RESEARCH

CELL PHONE RADIATION METER | INDEPENDENT RESEARCH

- Developed method for a phone camera to measure ionizing radiation dosage
- Automatically detect particle tracks from video data
- Won gold at Toronto Science Fair and published scientific paper in Journal for Student Science and Technology

AWARDS

2017	Silver Medal	Don Mills Programming Gala
2017	National Champion	Canadian Senior Mathematics Contest
2016	International	International Linguistics Olympiad