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

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 • Solidity • SQL • Processing • Bash • LaTeX

FRAMEWORKS AND TOOLS

Git • TensorFlow • Theano • Keras • Flask • Django • Node • Express • MongoDB • Bootstrap • Apache Spark • Synaptic • 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 software to automatically detect anatomical structures in MRI images to treat uterine fibroids
- Used image morphology techniques and unsupervised learning algorithms
- Increased efficiency of segmentation process by 80-90%

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

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 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 an evolutionary algorithm
- Demonstrated ability to learn and associate various environmental inputs

CHROME TAB PREDICTOR | JavaScript/Synaptic

- Chrome extension using a neural network to predict and open tabs
- Worked in a team of two to parse and organize data and implement a neural network in Synaptic

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

HACKATHONS

SOFA SEARCH | Hack the North 2017

- Recommendation system for sofas and other furniture
- Created convolutional neural network in Keras on a Theano backend to identify features from images of furniture
- Connected front and back end using Flask framework

AWARDS

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