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 • Bash • LaTeX

FRAMEWORKS AND TOOLS
Git • TensorFlow • 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

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 using thresholding
- 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