Yue(Violet) Guo

https://violetguos.github.io
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EDUCATION

BASc in Computer Engineering
Expected May 2018 | Toronto, ON
Minor in Robotics and Mechatronics
Certificate in Engineering Business
GPA: 3.09 / 4.0

COURSEWORK

UNDERGRADUATE

Machine Learning*
Artificial Intelligence: 94%, A+
Algorithm and Data Structure: A-
Signal Processing: A-
Communication Systems: A-
(*: in progress)

COURSERA

Data Science Project & R Programming

LINKS

Github:// **proguorammer**
LinkedIn:// **yvioletguo**
Twitter:// **@violetguos**

SKILLS

PROGRAMMING

C++ • C • Assembly • Matlab
• Python • LaTeX • Git
Familiar:
HTML/CSS • SQL

HACKATHONS

ANGEL HACK '16

Toronto, ON
Doc Now
http://www.hackathon.io/65602
Android app that aims to
reduce clinic wait times
Programmed in Java and SQL

UOFT AEROSPACE TEAM

Toronto, ON
Wired an Arduino chip and magnetometer to measure electromagnet data
Plotted electromagnetic field in C and MATLAB

EXPERIENCE

SYNAPTIVE MEDICAL | Systems Test Intern

Summer 2017 | Toronto, ON

- Tested and documented a cloud platform for medical imaging repository
- Collaborated with web developers to develop test cases, security, and performance specifications
- Summarized results in test reports and JIRA

SUNNYBROOK RESEARCH INSTITUTE | Research Student

Summer 2016 | Toronto, ON

- Assembled a circuit with radiofrequency(RF) generator, EEPROM, and RF ablation wire to test medical devices to meet standard specs
- Programmed Douglas-Peucker Algorithm in MATLAB to analyze RF ablation data and circuit parameters
- Rated top 10 among all summer research intern presentations at Sunnybrook's first science outreach event

PROJECT

MACHINE LEARNING ALGORITHM | Link to Github

- Solved handwritten digit recognition problem with Naive Bayes , Gaussian, and Bernoulli models without scikit-learn library, achieved 90% test accuracy
- Classified 20 news groups using SVM, neural net, and random forest, 80% test accuracy

ARTIFICIAL INTELLIGENCE PROJECT | Link to Github

- Programmed path finding algorithms, game tree with alpha-beta , and Hidden Markov Model in Berkeley Pacman framework
- Programmed an abstract CSP class in Python to solve Sudoku and n-queens

CYBERSECURITY PROJECT | C, SQL, Javascript

- Implemented C language memory exploit to inject code in another program
- Implemented a secure communication network socket in OpenSSL and verification of a cryptographic hash (HMAC and SHA1) in C
- Implement HTML, Javascript, and SQL attack on webpages

COURSERA DATA SCIENCE PROJECT | Link to Github

- Developed a web application to map world renewable energy generation
- Utilized googleVis and R to illustrate a large data set of 219 countries with an interactive map

SOCIETIES

ENGINEERING SOCIETY | Wellness Group, TechXplore

Oct 2016 – May 2017 | University of Toronto

- Programmed Wellness Group's online handbook
- Organized 4 workshops for students with no technical background to learn programming and other technical skills such as 3D printing
- Organized a machine learning hackathon for life science students and collaborated with a Toronto start up company