Alan Ma

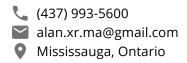📞 (437) 993-5600
✉ alan.xr.ma@gmail.com
📍 Mississauga, Ontario

Technical Skills

Web Development
- Designed websites and web applications using HTML, CSS, JavaScript, jQuery, AngularJS.
- Created a server using Raspbian and Nginx to host websites and allow remote access.

Operating Systems
- Installed and set up Windows 10, 8.1, and 7 systems
- Installed Linux, Raspbian, and Ubuntu systems
- Partitioned hard drives and reformatted disks
- Troubleshooting application issues

Machine Learning
- Implemented machine learning algorithms in MATLAB, including linear and logistic regression, gradient descent, and neural networks.

Data Processing
- Parsed and manipulated data in Python to obtain desired outputs given certain inputs.

Microsoft Office
- Familiar with Word, Excel, PowerPoint, and Outlook
- Tabulated data in Excel spreadsheets

Computer Assisted Design
- Used AutoCAD and 3DS Max to model designs
- 3D printed designs with PrintrBot Simple Metal

Experience

Product Development Internship   *2016*
at Prolexion (start-up grammar software company)
- Conducted a competitive analysis covering technical functionality and user experience
- Created a web application to input, store, and analyze test cases using HTML, CSS, JavaScript, and jQuery
- Wrote a report summarizing the strengths and weaknesses of competitors, as well as suggestions for our own product.

Machine Learning Co-op Student   *2016*
at The Journal for Student Science and Technology
- Researched machine learning at a university level
- Worked together with a graduate student from The University of Waterloo
- Wrote a paper titled "Applications of Machine Learning in Education," which has passed through PhD peer review and is undergoing final editing before publication.

Education

High School Student   *Current*
The Woodlands Secondary School
Honours Award
Current Average: 96%

Activities and Awards

- Top 1% in The University of Waterloo's Pascal mathematics contest (2014) and Canadian Intermediate Mathematics Contest (2015)
- Achieved a perfect score in Waterloo's Junior Canadian Computing Competition (2016)
- Ontario Principals' Council Leadership Award at Edenrose Public School (2011) and Dolphin Senior Public School (2014)
- First Place in Professional Engineers of Ontario's annual Mathletics Challenge (2013)
- SHAD Fellow, Alumni of SHAD 2016 at Memorial University of Newfoundland
- Won 1st place in 2016 Regionals for Business Law and Ethics Team Decision Making

Extracurricular Activities

Executive of Computer Science   *2015–Present*
- Responsible for teaching lessons to a club of over 30 members
- Taught programming and problem solving skills for competitions

Treasurer of Debate Club   *2014–Present*
- Managed club activities, such as organizing rounds and managing funds exceeding $1000
- Competed at many debate competitions with teams from across the country
- Taught lessons to over 70 members
- Used spreadsheets to manage tournament results

Director at DECA   *2014–Present*
- Taught lessons to the Business Management and Administration cluster

Editor-in-Chief of The Woodstock   *2014–Present*
- Responsible for the design of the school newspaper
- Directed workflow and delegated tasks to reporters
- Managed the Facebook page with over 1000 likes