

## ALEXANDRE GONTCHAROV

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### TECHNICAL SKILLS

Languages/Frameworks: Python, Java, JavaScript, C, Node.js, Express, AngularJS, Bootstrap3, HTML/CSS

Tools: Git, VirtualBox, AWS, Netbeans

Software Engineering: Scrum, Requirements Analysis

### EXPERIENCE

**Undergraduate Teaching Assistant**, *University of Guelph*

Sep 2015 - Apr 2017

- Led laboratory sessions, teaching introductory and intermediate programming concepts using C.
- Taught more complex concepts such as Makefiles, Valgrind and Git.
- Assisted in installing and debugging Raspbian and Debian (running on VirtualBox).

### PROJECTS

**Dialog System Compiler**, *Personal Project*

- Built an IDE that translate simplified input language into an executable Java GUI program.
- Created an IDE Finite State Machine compiler written in C and a stand-alone compiler written in Lex/Yacc.
- Front end designed in Java and connected to the IDE C compiler through JNI.
- A Bash script is included which guides the user through the installation of Dialog System Compiler.

**Rivals.GG**, *Personal Project*

- A MEAN (MySQL, Express, AngularJS, Node.js) stack web application using Riot Games APIs.
- Allows users to create and login into their accounts and perform search queries on multiple users.
- Follows the RESTful principles and performs authentication and authorization through JSON web tokens.

**Artificial Neural Network**, *Personal Project*

- Created a Machine Learning neural network based on the neural structure of the human brain.
- Compiled in Python with the Numpy library and trained through the Backpropagation algorithm.
- Tested with more complex datasets such as the Iris dataset from the UCI Machine Learning Repository.

**WellCat**, *Group Project*

- Worked on the public web interface team for WellCat using Node.js, React, JQuery and Bootstrap3.
- Performed Analysis Requirements and created a UML Diagram representation of the system.
- Operated under the Agile Framework Scrum and led the stand up meeting as Scrum Master.

### EDUCATION

**Software Engineering Honours Program**

2017

Bachelor of Computing, *University of Guelph*

### ACHIEVEMENTS & EXTRA-CURRICULAR

Society of Computer Science, *Community Liaison*

Jan 2016 - April 2016

CUSEC, *Software Engineering Conference*

Jan 2017

University of Guelph Dean's list

April 2016

### ADDITIONAL SKILLS

Fluent in French and Russian

Excellent communication skills

PADI Open Water Scuba Instructor

Emergency First AID Instructor