

ALEXANDRE GONTCHAROV

TECHNICAL SKILLS

Languages: C, Python, Java, JavaScript, HTML/CSS

Tools/Frameworks: Node.js, Express, AngularJS, Bootstrap, Jasmine, Karma, Git, VirtualBox, AWS, LaTeX

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