ABHINAV BHANDARI

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EDUCATION

MCGILL UNIVERSITY **Class of 2018**

Bsc. Major Computer Science and Minor Economics

- CGPA: 3.4

K. INTERNATIONAL SCHOOL, TOKYO **Class of 2014**

International Baccalaureate (Diploma Programme)

- Graduated high school with a final 39 IB Score and selected holistic student selected to speak on behalf of class

WORK EXPERIENCE

Rakuten Travel – *Backend Java developer* **May15 2016 – August 19 2016**

- Contributed to the development of an API, in Java 8, that optimizes flight search and vacation package search based on client and user requirements for the Travel department of the largest e-commerce company in Japan. Authored around 20 Java classes and worked in an Agile setting.
- Worked heavily with unit testing frameworks such as Spock and Mockito as well Spring and MyBatis. Learnt and worked with various design patterns such as builder pattern and factory pattern.

Infolytica – *Developer* **May 2 2017 – August 17 2017**

- Worked on an object oriented circuit simulator in C++, with libraries such as armadillo for matrices and boost. The simulator architecture was structured based on Spice files and how circuit objects are organized in that.
- Made a project manager that would fix or reorganize preprocessor macro settings across all projects in a solution file, in C#. This was also an object oriented program based on the MSBuild Project File design, which required the use of Microsoft's Solution parsing API. The project manager can be extended to include other build functionalities.

PROJECT

McGill Robotics Team Member **2016-2017**

- Developed a temperature and moisturizer sensor using an arduino that would buzz after meeting a threshold value. Used DHT and Keypad libraries and modules.
- Software Developer for McGill AUV (Autonomous Underwater Vehicle); implemented a yaw controller and parts of a PID controller in python. Also worked on mission planner and tasker for the robot.

Tablut AI Player **2016**

- Developed an AI for a Viking board game called Tablut. I used alpha-beta pruning on minimax, as well a dynamically changing evaluation function which would be modified depending on the state of the game.

8-Square Puzzle Solver **2018**

- Implemented a depth first search and breadth first search solver to the 8-Square puzzle in javascript. Used the p5.js to sketch the solution tree.

Subreddit Classifier **2017**

- A classifier program in python that takes in a comment from Reddit and predicts which subreddit it comes from. Implemented a convolutional neural network and recurrent neural network to test effectiveness. Implemented a word embedding layer using Glove vectors.

Sumbasic Automatic Summarizer **2017**

- Implemented SumBasic algorithm in python to summarize multi-class documents that also incorporates a non-redundancy weighting method to lower the score of popular words to be used for subsequent sentences in the summary.

Link State Router **2017**

- A simulation of a link state router that connects to other routers. Implemented in Java through socket programming and multi-threading to handle multiple server connections with a router.

EXTRA CURRICULAR ACTIVITIES

Arts Undergraduate Society First Year Council – *McGill University* **September 2014 – April 2015**

International Student Representative/Vice President

- Represented 2000 first-year art students and organized large events such as exam work shops or meets with professors.

Japanese Students' Society – *McGill University* **September 2014 – April 2016**

First Year Representative, Finance/Vice President

- Managing accounts; project budget costs and actual costs of events

SKILLS & INTERESTS

Languages: English, Hindi, and Japanese **Interests:** Football, Guitar and Songwriting, Card games specifically Bridge