JAY KARON

Location: North York, Ontario

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EDUCATION

York University – Lassonde School of Engineering　　　　　　Sep 2016 – Present

Honours BSc of Computer Science. Graduating August 2019.
Currently maintaining an A average (8.46 / 9 GPA).
Favourite courses: Advanced Data Structures, Computer Vision and Theory of Computation.

EXPERIENCE

Geospatial Visual Analytics Lab, York University　　　　　　Apr 2018 – Present

Full Stack Developer and System Administrator, Toronto, ON, Canada

Developed a web system to process, store and display water depth data from a variety of sources and formats. Responsible for the whole stack; Linux administration, database design, web framework, map system and front end.

Summer 2018: Full-time developer
- ❖ Led a 2-person team to create a working prototype from scratch.
- ❖ Used Django and Python to develop a complex website supporting user accounts, file upload and parsing, and an API for controlled database access.
- ❖ Designed an SQL schema for the data and metadata of bathymetry surveys (PostgreSQL).

Fall 2018 – Spring 2019: Part-time consultant/trouble-shooter
- ❖ Familiarized master's students with features of the system.
- ❖ Managed the permissions, firewall and other aspects of the Linux server (Ubuntu).
- ❖ Responded to emergency issues related to the server.

Summer 2019 (Present): Part-time developer to review old features and develop new ones.

Shaarei Shomayim Congregation　　　　　　Sep 2018 – Present

Youth Director, Toronto, ON, Canada

Facilitates weekly religious services and discussions at a local synagogue for youth ages 10 – 17.

Louis Brier Jewish Aged Foundation　　　　　　Jul 2016 – Aug 2016

Donor Information Coordinator, Vancouver, BC, Canada

Used technology such as automated Excel spreadsheets and Word templates to streamline common tasks for a foundation that raises funds for a resident care home.

AWARDS

Merei Family Scholarship　　　　　　Feb 2019

For achieving the highest GPA among upper year students of Lassonde School of Engineering.

Irvine R. Pounder Award　　　　　　Feb 2018

For the top student of each academic year in Mathematics and Statistics at York University.

Chair's Honour Roll – Mathematics and Statistics　　　　　　Nov 2017

For excellence in Mathematics and Statistics courses at York University.

Infotech Award　　　　　　Jun 2014

For outstanding performance in technology-related courses upon graduating high school.

VOLUNTEERING

Yachad   Dec 2017 – Current
Supervisor, Toronto, Ontario, Canada
Volunteer aide for individuals with special needs on weekend retreats.

SKILLS

Programming	Life	
Familiar with Python, Java and JS	*Strong Work Ethic*	*Enthusiasm*
SQL and Database Design	*Analytical Thinking*	*Microsoft Office*
Modern Web Technologies	*Team Player*	*Interest in Math*
Linux/Bash Scripting	*Attention to Detail*	
Basic Git Usage	*Problem Solving*	

PROJECTS[1]

Computer Science Project: *Algorithmics Animation Workshop[2]*   Jan 2019 – Apr 2019
Built a website to facilitate the visualization of algorithms and data structures.
- ❖ Created a well-documented, high-level package to ease development of future animations.
- ❖ Built with modern web technologies: Typescript, Webpack and Bootstrap.

Course Final Project: *Tree Ring Detection*   Sep 2018 – Dec 2018
Worked on augmenting a computer vision technique to identify tree rings described by
Fabijanska *et al.*[3] (2017) using alternate filtering methods.
- ❖ Developed in MATLAB.
- ❖ Academic report written according to CVPR standards.[4]

Esri App Competition: *Hoodie*   Mar 2018
Lead web developer of a 4-person team to create a prototype web system to rank apartments
based on neighbourhood factors for a week-long challenge from Esri Canada.

Personal Website   Nov 2017 – Jan 2018
A portfolio website that hosts information about me and my projects.
- ❖ Made using Bootstrap, jQuery and SASS.
- ❖ Includes a playable, canvas-based JavaScript game.

Java Roguelike   Jan 2014 – Jun 2014
A turn-based, role-playing game with ASCII graphics made in high school.
- ❖ Over 3000 lines of Java code.
- ❖ Uses concepts like recursion, object inheritance and cellular automata.

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[1] More information about my projects can be found at https://jaykaron.github.io/projects/.
[2] Hosted at https://www.eecs.yorku.ca/~aaw/.
[3] A. Fabijanska, M. Danek, J. Barniak, and A. Piorkowski. Towards automatic tree rings detection in images of scanned wood samples. *Computers and Electronics in Agriculture*, 140:279–289, 2017.
[4] Report available at https://jaykaron.github.io/imgs/treeRingReport.pdf.