Jay Karon

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Education

York University – Lassonde School of Engineering   Sep 2016 – Aug 2019
Honours BSc in Computer Science, A average, final GPA 3.87 / 4

Experience

Full-Stack Developer, Lead Programmer – *Mapsted, Toronto*   Jun 2020 – Present
Lead programmer of a small team building control and integration SPAs for an indoor mapping platform.
- Technologies – Core: Node, React, MySQL, Mongo. Minor: C#, NextJs, OpenLayers, Stripe
- Distributed work among team members; Supported teammates with pair programming and code reviews
- Introduced new technologies, such as ESLint, Docker and Jenkins to the team
- Reduced website load time by 30% via caching and query optimization

Applied Quantum Computing Researcher – *Intelligent Data Analytics, Toronto*   Jul 2020 – Present
Implementing and analyzing hybrid quantum computing algorithms for hard optimization problems.
- Benchmarked hybrid quantum algorithms using gate-based machines (IBM), quantum annealers (D-Wave) and classical solvers. Techologies: Python, NumPy and scikit-learn
- Applied state-of-the-art quantum algorithms to chemical optimization and classification problems
- Presented a workshop on genetic algorithms to master's students of DTU
- Findings discussed in an academic report (available upon request)

Serverless System Developer – *Unnamed Group, Toronto*   Nov 2019 – Mar 2020
The sole developer of a POC to integrate geospatial data along with various means of data visualization.
- Technologies: Python, AWS (S3, Lambda), React, Mongo, Serverless Framework
- Developed with zero infrastructure costs on AWS using fully serverless methodologies

Full-Stack Developer & Sys Admin – *Geospatial Analytics Lab, York University*   Apr 2018 – Aug 2019
Headed a two-person team to create a web system to handle water-depth data in a variety of formats.
- Technologies: Ubuntu, PostrgreSQL, Django, JS, Docker
- Was responsible for the whole stack; sys admin, database design, web framework and front end

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.

Skills

Technological		General	Personality
Node & React	*Python & Django*	*Clear Communication*	*Upbeat*
SQL & MongoDB	*Typescript*	*Debugging*	*Curious*
Quantum Computing	*Mathematical*	*Research (Technical &*	*Team Player*
AWS	*Optimization*	*Academic)*	*Industrious*

Projects[1]

Paper Conduit   Jan 2020
Designed a clean, responsive front-end for a blog publishing platform with React.

Computer Science Project: *Algorithmics Animation Workshop*[2]   Jan 2019 – Apr 2019
Built a website to visualize algorithms including documentation to simplify development of future animations.

Course Final Project: *Tree Ring Detection*   Sep 2018 – Dec 2018
Augmented technique to identify tree rings by Fabijanska *et al.* (2017) with alternate filtering methods[3].

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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] Report available at https://jaykaron.github.io/imgs/treeRingReport.pdf.