JOHN HOWAT

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Education

2008 – 2012	Doctor of Philosophy in Computer Science	*Carleton University*
2007 – 2008	Master of Computer Science	*Carleton University*
2003 – 2007	Bachelor of Computer Science (Highest Honours) Minor in Mathematics	*Carleton University*

Experience

2014 – 2015　**Instructor**　*Carleton University*
Taught 6 undergraduate courses on Python, Java, C++, discrete mathematics, and cryptography with a total enrollment of about 1,100 students. Managed 39 teaching assistants. Received a Professional Achievement Award (only two awarded throughout the university).

2012 – 2014　**Postdoctoral Fellow**　*Queen's University*
Wrote custom C++ and Java software for our partner firm for the cleaning and manipulation of large 3D meshes in the context of laser-scanning and 3D-printing operations. Designed new memory-efficient algorithms that drastically increased the sizes of meshes that can be processed.

2009 – 2012　**Contract Instructor**　*Carleton University*
Taught 5 undergraduate courses on discrete mathematics and the design and analysis of algorithms.

2005 – 2012　**Teaching Assistant**　*Carleton University*
Ran tutorials, held office hours, and graded assignments under tight deadlines.

Skills

Programming	C, C++, Java, Python, Perl, SQL (MySQL)
Development	Big data analysis, Git, object-oriented development, cryptography, databases
Software	Windows, Linux (Ubuntu), LaTeX, Maple
Research	Data structures (especially those that adapt to queries), algorithm design
Communication	Teamwork (problem solving, documenting results), teaching/presenting to both technical and non-technical individuals and groups

Selected Awards and Scholarships

2015	Professional Achievement Award	*Carleton University*
2009–2012	Canada Graduate Scholarship (Doctoral)	*NSERC*
2008–2009	Canada Graduate Scholarship (Master's)	*NSERC*