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☎ (617) 304-6610

# SERGEY GORBUNOV

## SUMMARY AND OBJECTIVE

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I am a PhD computer science student in my final year at MIT. I have deep knowledge and experience in designing and building cryptographic protocols for efficient access control over big data, verifiable computation and software obfuscation. I also have experience in computer networks, software security and distributed protocols. I have a strong vision and interest in engineering and building secure systems to address challenges of modern cloud-driven and mobile environments.

## WORK EXPERIENCE

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PERIOD	<b>January 2014 — Present</b>	
EMPLOYER	<b>MIT</b>	Cambridge, USA
TITLE	<b>Research Assistant</b>	
ADVISOR	<b>Vinod Vaikuntanathan</b>	
	PhD graduate level security research with focus on design of new cryptographic algorithms for fine-grained access to encrypted big-data, verifiable outsourcing computation and software obfuscation.	
PERIOD	<b>September 2011 — December 2013</b>	
EMPLOYER	<b>University of Toronto</b>	Toronto, Canada
TITLE	<b>Research Assistant</b>	
ADVISOR	<b>Vinod Vaikuntanathan</b>	
	M.Sc. graduate level security research with focus on design of new cryptographic algorithms for computing on encrypted data.	
PERIOD	<b>June 2013 — August 2013</b>	
EMPLOYER	<b>IBM</b>	Yorktown Heights, USA
TITLE	<b>Cryptography Research Intern</b>	
MENTOR	<b>Shai Halevi</b>	
	Designed new cryptographic primitives for software obfuscation and functionalities for computing on encrypted data.	
PERIOD	<b>May 2011 — August 2011</b>	
EMPLOYER	<b>University of Toronto</b>	Toronto, Canada
TITLE	<b>Software Developer</b>	
	Designed and developed protocols for large scale distributed computation and Software Defined Networks.	
PERIOD	<b>January 2011 — May 2011</b>	
EMPLOYER	<b>University of Toronto</b>	Toronto, Canada
TITLE	<b>Software Developer</b>	
	Designed and engineered cloud-driven security solution for mobile devices, backed by strong encryption algorithms.	

PERIOD	<b>May 2009 — August 2009</b>	
EMPLOYER	<b>IBM</b>	Markham, Canada
TITLE	<b>Software Developer</b>	
	Developed, improved and maintained tools and infrastructures of DB2 reliability, availability, serviceability and problem determination.	

## EDUCATION

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DATE	<b>May 2015 (expected)</b>	
DEGREE	<b>PhD Computer Science</b>	
UNIVERSITY	<b>MIT</b>	Cambridge, USA

DATE	<b>September 2012</b>	
DEGREE	<b>Master of Computer Science</b>	
UNIVERSITY	<b>University of Toronto</b>	Toronto, USA

DATE	<b>September 2011</b>	
DEGREE	<b>Honors Bachelor of Computer Science</b>	
RANK	<b>With High Distinction</b>	
UNIVERSITY	<b>University of Toronto</b>	Toronto, USA

## SKILLS

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<b>Skills</b>	Linux, Mac OS, Windows
<b>Computer Languages</b>	C/C++, Java, Python, Perl, Shell Scripting
<b>Protocols</b>	TCP/IP, DNS, DHCP, NAT, VPN, crypto protocols
<b>Databases</b>	IBM DB2, MySQL, PostgreSQL, Microsoft SQL
<b>Tools</b>	Eclipse, MS Visual Studio, BlueJ

## PUBLICATIONS

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Available for download: <http://people.csail.mit.edu/sergeyg/>

## SELECTED HONORS

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**Microsoft PhD Fellow 2014**  
**Alexander Graham PhD Bell Canada Graduate Scholarship (declined)**  
**Various Research and Excellence Awards**