

# ALIN TOMESCU

## PERSONAL INFORMATION

*email* [alinush@mit.edu](mailto:alinush@mit.edu)  
*website* <http://alinush.org>

## WORK EXPERIENCE

	<i>2012–2013, Summer 2014</i>	<b>PRIVATE MACHINES</b>
<i>Head of Research and Development</i>		Designed, implemented and deployed the first prototype of the CipherRack secure cloud infrastructure. Designed and implemented cryptographic protocols for CipherLocker, a secure searchable cloud file storage engine, as well as other proprietary cryptographic protocols.
	<i>Summer 2011</i>	<b>MICROSOFT</b>
<i>Software Development Engineer in Test (Intern)</i>		Developed a flexible performance framework in C# for testing critical Microsoft SQL stored procedures used throughout their AdCenter Business Intelligence system. Developed an ASP .NET user interface in C# for charting and graphing performance results across release cycles. Developed an automated code deployment tool for running daily basic viability tests on the latest builds.
	<i>2008–2009</i>	<b>STONY BROOK UNIVERSITY</b>
<i>Information Technology Specialist</i>		Developed websites for various programs within the Outreach Division of Stony Brook's Professional Education Program. Developed and maintained Microsoft Access databases. Created and administered LISTSERV mailing lists. Assisted staff with various computer-related issues.

## EDUCATION

	<i>2015–present</i>	<b>MASSACHUSETTS INSTITUTE OF TECHNOLOGY</b>
<i>Doctor of Philosophy</i>		School: Electrical Engineering and Computer Science Advisor: Prof. Srinivas DEVADAS
	<i>2013–2015</i>	<b>MASSACHUSETTS INSTITUTE OF TECHNOLOGY</b>
<i>Masters of Science</i>		GPA: 4.7 · Major: Computer Science Thesis: <i>PowMail: Want To Fork? Do Some Work.</i> Description: This thesis explored the idea of using cryptographic puzzles computed by email users to prevent equivocation in public key directories. Advisor: Prof. Srinivas DEVADAS
	<i>2008–2012</i>	<b>STONY BROOK UNIVERSITY</b>
<i>Bachelors of Science</i>		GPA: 3.98 · <i>Summa Cum Laude</i> · Major: Computer Science · <i>Honors</i> Advisor: Associate Prof. Radu SION

## PUBLICATIONS

PrivateFS: A Parallel Oblivious Filesystem · ACM CCS · 2012 · Peter WILLIAMS, Radu SION, Alin TOMESCU

## RESEARCH EXPERIENCE

	<i>2013-present</i>	COMPUTATION STRUCTURES GROUP
<i>Research Assistant</i>		Focused on access pattern privacy, encrypted web applications, public key infrastructure (PKI) research. Affiliations: MIT; CSAIL Advisor: Prof. Srinivas DEVADAS
	<i>2011-2012</i>	NETWORK SECURITY AND APPLIED CRYPTO LAB
<i>Research Assistant</i>		Focused on access pattern privacy research. Affiliations: Stony Brook University. Advisor: Associate Prof. Radu SION

## TEACHING EXPERIENCE

	<i>Spring 2014</i>	INTRODUCTION TO ALGORITHMS (6.006)
<i>Teaching Assistant at MIT</i>		Taught four recitation sessions each week. Taught two review sessions before midterm exams. Developed programming assignments for the problem sets. Wrote recitation notes for students. Developed questions for the student exams. Helped students on the class discussion board and over email. Held biweekly office hours. Provided additional learning resources for my own section students.
	<i>Spring 2011</i>	ADVANCED C/C++ PROGRAMMING (CSE230)
<i>Teaching Assistant at Stony Brook University</i>		Taught four CSE230 lectures on object oriented design in C++. Helped students with C and C++ programming questions during officer hours.
	<i>Fall 2009</i>	INTRODUCTION TO JAVA (CSE114)
<i>Teaching Assistant at Stony Brook University</i>		Held biweekly, one-hour and twenty-minutes programming labs. Responsible for overseeing, teaching and grading thirty students in CSE114. Helped and advised students during office hours and over email.
	<i>2009-2012</i>	STONY BROOK COMPUTING SOCIETY
<i>Exam Reviewer</i>		Taught review sessions for Java programming, discrete mathematics and data structures exams.

## OTHER INFORMATION

<i>Awards</i>	The SUNY Chancellor's Award for Student Excellence · <i>State University of New York (SUNY)</i> · 2012 Undergraduate Recognition Award for Academic Excellence · <i>Stony Brook University</i> · 2012 Outstanding Academic Achievement Award · <i>Stony Brook University</i> · 2009-2012 University Scholars Senior Leadership Award · <i>Stony Brook University</i> · 2011 February 2011 Student of the Month Award · <i>National Residence Hall Honorary Chapter at Stony Brook University</i> · 2011
<i>Leadership</i>	Secretary of the Ashdown House Executive Committee <i>Massachusetts Institute of Technology</i> · 2014-2015 President of the Romanian Student Association · <i>Massachusetts Institute of Technology</i> · 2014-present

Student Ambassador for the Stony Brook Computer Science Department ·  
*Stony Brook University* · 2011–2012

Cofounder, Vice-President and President of the Stony Brook Game Developers  
Club · *Stony Brook University* · 2009–2010

*Communication  
Skills*

Best Computer Science Senior Honors Project Presentation Award · *Stony  
Brook University* · 2012

*Languages*

ROMANIAN · Mothertongue

ENGLISH · Fluent

SPANISH · Basic (simple words and phrases only)

FRENCH · Basic (simple words and phrases only)

*Interests*

Piano · Weightlifting · Dancing

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