

Alex Chernyakhovsky

Education

2010–2013 **Bachelors of Science in Electrical Engineering and Computer Science**,
Massachusetts Institute of Technology, Cambridge, MA.

Relevant Coursework:

- 6.858 – Computer Systems Security
- 6.828 – Operating System Engineering
- 6.857 – Network and Computer Security
- 6.033 – Computer Systems Engineering

Experience

July 2013–
Present **Software Engineer**, *Google*, Cambridge, MA.

Jan–Aug
2012 **Software Engineer**, *Silhouette Technologies*, Cambridge, MA.
Worked on low-level Android components to improve Android security

Detailed achievements:

- Worked on Linux Kernel to add features to Android
- Added functions missing in Android Bionic libc
- Worked on interfacing native (C/C++) Android applications with traditional (Java) applications

2006–2010 **Collaborative Researcher**, *Miami University*, Oxford, OH.

Developed 100,000 SLOC (C++) parallel, distributed, simulation of Avian Influenza as well as all associated modelling, analysis, and visualization tools. The system, called SEARUMS, has resulted in numerous publications in peer-reviewed conferences, journals, and has received invitations to extend the papers into book chapters.

Languages

C/C++	Fluent	<i>over 10 years of experience</i>
Java	Fluent	<i>over 8 years of experience</i>
Python	Fluent	<i>over 3 years of experience</i>
Shell	Fluent	<i>knowledgeable in both bash and tcsh</i>
HTML/CSS	Fluent	<i>emphasis on standards compliance</i>
SQL	Fluent	
JavaScript	Fluent	
PHP	Proficient	

Skills

- **Tools**

Emacs, Eclipse, ANTLR, Microsoft Visual Studio, GNU Compiler Collection, GNU autotools, gdb, valgrind, cvs, svn, git

- **Web Tools & Frameworks**

Django, Flask, Twitter Bootstrap, HTML5 Boilerplate, Solr, node.js

- **Linux/UNIX Administration**

SSH, Kerberos, NFS, IMAP, sendmail, postfix, httpd, Samba, BIND DNS, MySQL, LDAP (389)

- **Operating Systems**

Linux (Fedora, RHEL, Ubuntu, Debian), OS X, Sun/Oracle Solaris, Microsoft Windows 2000/XP/Vista/7

- **HPC (High Performance Computing)**

Torque (aka PBS), Sun Grid Engine, MPI, ROCKS Cluster OS, Cluster administration

- **Document and Graphics Manipulation**

Adobe Creative Suite, Microsoft Office, L^AT_EX, Gnuplot, Xfig

- **Bioinformatics Tools**

MUSCLE, ClustalW, Phylip, BLAST, Jalview, BioPython

Activities

SIPB **Student Information Processing Board** (SIPB) is MIT's volunteer computing services group, providing services to MIT and the broader community.

- SIPB Chair (2013). SIPB Vice Chair (2012-2013)

- scripts.mit.edu maintainer and project architect. Scripts provides hosting for dynamic content, and serves as a companion to web.mit.edu, which can only serve static web pages; supporting over 4000 users. Scripts utilizes multiple servers and load balancers to guarantee uptime and availability.

- linerva.mit.edu maintainer. Linerva is the most popular remote-access server on campus, with an average of 200 logged-in users.

- xvm.mit.edu maintainer. XVM is MIT's one-click virtual server service, running over 500 virtual machines.

Fedora **Fedora Packager** for the *mosh* project

Debian **Debian Maintainer** for the *byobu* project

Awards

2008–2009 **Young Epidemiology Scholars Competition.**

National First-Place Winner \$50,000 College Scholarship

2008–2009 **Intel International Science and Engineering Fair.**

US Army 'Operation Cherry Blossom' Award (Trip to Japan)

US Air Force 1st Place in Medicine and Health Award

National Anti-Vivisection Society Award

2007–2008 **Intel International Science and Engineering Fair.**

2nd Place Team Award (Medicine and Health)