

Adam Wolfe Gordon

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Work Experience

DigitalOcean

Software ■■■■■■■■

May 2016 to Present

- The Association of Professional Engineers and Geoscientists of Alberta (APEGA) forbids me to disclose my job title, under Alberta's Engineering and Geosciences Professions Act.
- Development on block storage (Volumes).

EMC

Principal Software ■■■■■■■■

July 2015 to May 2016

Senior Software ■■■■■■■■

January 2012 to June 2015

- The Association of Professional Engineers and Geoscientists of Alberta (APEGA) forbids me to disclose my job title, under Alberta's Engineering and Geosciences Professions Act.
- Feature development, performance enhancement, and bug fixing in the core i/o-path software for VPLEX, EMC's distributed storage virtualization and availability product.
- Product development in C and C++, including modern C++11, on Linux. Test and infrastructure development in Python. Active participant in an evolving Scrum-based development process.
- Collaboration with other product groups within EMC to plan new integrated solutions and interoperability features.
- Development of proof-of-concept software and systems to demonstrate and plan future VPLEX features. Collaboration with product management and development leadership to transition proof-of-concept work into fully planned features.
- Software architect for the VPLEX/VE virtual storage appliance for VMware vSphere. Key contributor to the software iSCSI driver for VPLEX/VE.

Invidi Technologies

Emulation and Scale Testing Developer (Contractor)

November 2011 to January 2012

- Designed and implemented emulation tools for use in scale testing.
- Assisted in planning scale testing activities and processes within the QA department.

DataGardens

System ■■■■■■■■

July 2011 to October 2011

- The Association of Professional Engineers and Geoscientists of Alberta (APEGA) forbids me to disclose my job title, under Alberta's Engineering and Geosciences Professions Act.
- Prototyped new features for DataGardens SafeHaven, a VMware-based business continuity product, using C, Perl, and VMware vSphere APIs.
- Analyzed and experimented with new technologies.
- Developed product demos for internal and external use.

Department of Computing Science, University of Alberta

Teaching Assistant, Operating Systems

January 2010 to April 2011

Teaching Assistant, Computer Architecture

September 2009 to December 2010

- Planned and presented lab presentations.
- Answered student questions in the lab and online.
- Marked assignments.

ATLAS Project, Department of Physics, University of Alberta

Summer Student Developer

May 2009 to August 2009

- Developed an automated site-testing platform for the computing grid associated with the CERN Large Hadron Collider.

Research Group, Invidi Technologies

Associate Software Developer (Intern)

May 2007 to August 2008

- Developed simulation and experimentation tools for a targeted television advertising system.
- Performed experiments and analyzed results.

Dr. Paul Lu, Department of Computing Science, University of Alberta

NSERC Summer Student

May 2006 to August 2006

- Developed a Samba extension to access remote files and directories using the Trellis filesystem virtualization infrastructure.

Education

Master of Science, Computing Science

University of Alberta, Edmonton, AB

June 2011

- *Thesis:* Enhancing Cloud Environments with Inter-Virtual Machine Shared Memory
- *Supervisor:* Dr. Paul Lu
- *Awards:* Queen Elizabeth II Graduate Scholarship, Graduate Student Teaching Award

Bachelor of Science with Honors, Computing Science

University of Alberta, Edmonton AB

April 2009

- *Selected Coursework:* Compiler Design, Cluster Computing, Embedded Operating Systems, Computer Architecture, Non-Classical Logic

Refereed Publications

Adam Wolfe Gordon and Paul Lu. Elastic Phoenix: Malleable MapReduce for Shared-Memory Systems. In *8th IFIP International Conference on Network and Parallel Computing (NPC 2011)*. Springer, 2011.

Adam Wolfe Gordon and Paul Lu. Low-Latency Caching for Cloud-Based Web Applications. In *Proceedings of the 6th International Workshop on Networking Meets Databases (NetDB '11)*. Athens, Greece. June 12, 2011.

Selected Projects

Volume Control Widget

Android Widget

- Android widget for volume display and adjustment.
- Source: <http://xvx.ca/code/volume-widget>

Nahanni Memcached

Caching Server and Client (Masters Thesis Work)

- Fork of memcached that keeps data in inter-VM shared memory.
- Improves application latency by allowing co-located virtual machines to access cached data without using the network.
- Includes C, Python, and Java client libraries.

Elastic Phoenix

MapReduce Framework (Masters Thesis Work)

- Based on the Phoenix MapReduce framework from Stanford.
- Allows resources to be dynamically added and removed from jobs.
- Allows workers to run in virtual machines using inter-VM shared memory.
- Source: <https://github.com/adamwg/elastic-phoenix>

Interests and Activities

- *Computing-Related:* Operating Systems. Filesystems. Distributed Computing. Virtualization. Programming Languages. Formal Verification. Software Engineering and Quality.
- *Non-Computing-Related:* Ski Racing with the Alberta Masters Ski Club. Cooking. Coffee.