



Highlights of Achievements

- Apache Spark Committer and PMC member
- Received IBM OTAA award and Google Open Source Peer Bonus for work on Apache Spark
- Frequent Conference Speaker - publicly available Spark talks at <http://bit.ly/holdenSparkVideos> including invited and keynotes
- Co-Author of Learning Spark - <http://shop.oreilly.com/product/0636920028512.do> and High Performance Spark - <http://shop.oreilly.com/product/0636920046967.do>, and Author of Fast Data Processing With Spark - <http://www.packtpub.com/fast-data-processing-with-spark/book>
- Updated linux kernel wireless drivers
- Proposed, developed and implemented source code search engine, lead migration of foursquares search system
- Created plt-scheme web application feature on Slashdot and other media
- For more see <http://holdenkarau.com/project.html> & <https://github.com/holdenk>

COMPUTER SKILLS

Languages Scala, Scheme, Java, Perl, C, C++, SQL

Markup Languages \LaTeX , HTML, XML

Development Tools Emacs, Valgrind, GDB, CVS, SVN, GIT, SWIG

Operating Systems: Linux/Unix

EXPERIENCE

Google (Cloud)

October 2017 - Present

Open Source Big Data Developer Advocate

- Joined Apache Spark PMC
- Became member of the Apache Software foundation
- Worked on improvements for Spark focused in Core, ML, and Python
- Provided steering and guidance for OSS based big data products including Dataproc and Apache Beam.
- Helped grow external Beam and Spark contributors and community.
- Gave talks and training sessions for Spark, Beam, and Kafka.

IBM - Spark Technology Center (Watson Data Platform)

October 2015 - October 2017

Principal Software Engineer

- Became Apache Spark Committer
- Worked on improvements for Spark focused in Core, ML, and Python
- Helped other developers get up to speed and contribute to Spark (both in code & community)
- Gave talks and training sessions for Spark

Alpine Data Labs

May 2015 - October 2015

Senior Software Development Engineer

- Worked on improvements to Alpine's Spark integration
- Worked on improvements for Spark

Databricks

February 2014-May 2015

Senior Software Development Engineer

- Worked on backend improvements for Databricks Cloud
- Worked on improvements for Spark
- Created and improved integrations with external libraries and projects
- Taught and Assisted Spark Trainings

- Google* August 2012-February 2014
Software Development Engineer
- Worked on improvements to the Google+ storage backend
 - Worked on different methods to improve recommendations on Google+
 - Taught introductory engineering class
- Foursquare* March 2011-August 2012
Software Development Engineer
- Worked on improving venue & user search in Scala using Elastic Search, Solr, and Lucene
- Amazon* May 2008 - August 2008, September 2009-2011
Software Development Engineer
Software Development Intern
- Created product miss-classification detection system using AI techniques
 - Helped create a system to recommend browse nodes for search keywords
- Microsoft* January 2008 - April 2008
Program Manager Intern
- Spec-d and costed various performance improvements
- Google* Summer 2007
Summer of Code
- Gained commit access to Subversion repository and contributed bindings for Subversion in Scheme
- UW Enterprise Co-Op (All The Code)* Summer 2007
Software Developer and Everything Else
- Proposed, developed, and implemented source code search engine, All The Code
 - Scaled Ruby on Rails application in collaboration with AideRSS
- Pigs Can Fly Computing - Computer Consulting Company* Summer 2002 - Fall 2006
Software Developer and Everything Else Owner
- Employed, supervised, and lead teams of programmers in software development
 - Worked collaboratively with clients to specify their objectives and interpret these goals to the team
- Xandros - Linux Distro* September 2006 - December 2006
Software Developer
- Improved wireless signal strength reporting in numerous drivers
 - Forward ported various wireless drivers
- Net Integration - Linux based intelligent servers* Jan 2006 - April 2006
Evil Death Ray
- Created a transparent dynamic mirror selection Apache module
 - Wrote Perl library for automated cross-platform integration testing
 - Developed automated tests and reviewed test results
- Department of Housing Technology Waterloo - Residence computer network* Summer 2005, Fall 2005, May 2006 - September 2007
Senior Residence Computer Consultant & Technical Support Specialist
- Trained and supported ResNet computer consultants in maintaining and utilizing networking tools for residence users
 - Wrote virus removal tools to handle viruses not properly removed by Norton Anti-Virus

EXTRA-CURRICULAR ACTIVITIES

- Systems Administrator*, University of Waterloo Computer Science Club, Fall 2005, Summer 2006, and Winter 2007
- Treasurer*, University of Waterloo Computer Science Club, Winter 2005
- President*, University of Waterloo Computer Science Club, Fall 2007

EDUCATION

Bachelor of Math, Computer Science, Business Option (Co-Op) 2004-2009
University of Waterloo, Waterloo, Ontario, Canada
Completed CS444 [Compilers] & CS452 [Real Time Operating Systems]