Milo Polte

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Work Experience

2012-2015

Software Engineer and Manager/Tech Lead for WibiData, Inc (San Francisco).

Fourth employee at a Big Data startup that grew to over forty, surviving one name change and three changes to the logo. Technical work was the development of a platform for personalized applications on top of Hadoop, HBase, and Cassandra. Our platform was used in production to deliver product recommendations at two large retail customers, including holiday traffic.

I was the project/tech lead on the effort to open source our software stack, responsible for breaking down the entire effort into manageable, prioritized tasks for the team. This was the beginning of the Kiji Project. Later, I also was the tech lead on our earliest real time scoring component, Kiji Scoring

As we grew, I transitioned to a dual technical-managerial role, managing ten direct reports during my tenure (a maximum of five at one time).

My last position was Tech Lead/Manager of the platform team, responsible for the lowest level core technologies in WibiData's architecture as well as our internal build tools and scripts.

2011 (3 months)

Software Engineer at Panasas (Pittsburgh, PA).

Internship after leaving grad school. Relevant project work was the instrumentation of a FreeBSD kernel driver to implement QoS I/O scheduling in network attached storage devices for our parallel, distributed filesystem.

Technologies and Skills

Python

Most of my recent technological work has been in Python. Author of devtools and small build components, e.g. packrat.

Java

Experienced coding distributed applications and map-reduce programs in Java. I've also used Scala but am less familiar with it.

Hadoop Stack

I've used a variety of technologies in the Hadoop ecosystem for model training and analytics: MapReduce, Yarn, HBase, Hive, Scaldng, etc. This space is always moving and I've had to port our ecosystem to different versions of the Cloudera Distribution of Hadoop and others, dealing with the bugs and changes along the way.

SCRUM and hygienic coding

I was one of the first scrum masters at WibiData. Led Sprint Planning for platform team. Experienced in a culture of culture of code reviews, code style guides, etc. Owned the effort on writing our Python style guide.

Education

2006-2011

Masters Degree in Computer Science with partial work towards a PhD at Carnegie Mellon University (Pittsburgh, PA)

Advisor: Garth Gibson.

- Conducted research in CMU's Parallel Data Lab group under the programs of the Petascale Data Storage Institute and the Institute For Reliable High Performance Information Technology.
- Benchmarked Flash-based SSDs and evaluated cost efficiency of different hybrid configurations. Papers: http://www.pdl.cmu.edu/PDL-FTP/PDSI/simsa-pdsw08.pdf and http://www.pdl.cmu.edu/PDL-FTP/PDSI/Polte.pdf. Included work inside the Linux

kernel.

- Collaborated with Los Alamos National Laboratory in the design and implementation of the Parallel Log-structured File System. Papers: http://institutes.lanl.gov/plfs/plfs.pdf and http://www.pdsi-scidac.org/events/PDSW09/resources/pdsw09-final9.pdf
- Investigated the design of parallel filesystems for HPC built on top of BigTable-like software. Paper: http://www.cs.cmu.edu/~svp/2009hotcloud-tablefs.pdf

1999-2005

Bachelor of Arts and Master of Engineering in Computer Science at Cornell University(Ithaca, NY)

Emphasis on courses in Distributed Systems, Networks, and Theory.

- Independent Research with Prof. Emin Gun Sirer (2001- 2002) Researched and developed an anonymizing peer-to-peer overlay network based on dining cryptographer nets called 'Herbivore'. White paper available: http://www.cs.cornell.edu/People/egs/herbivore
- Cornell University Neurobiology Department (2005) Software engineer for audio experimentation and education cross platform workbench program called "Koé", providing functionality similar to professional synthesis applications, such as Reaktor.

Hobbies and Other Activities

- Hiking
- Vegetarian Cooking
- Losing at Dota
- Taking care of my pet rabbit