AARON JONES

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PROFILE

Senior software engineer with over 6 years of embedded firmware development and team leadership experience in the disk array industry, and a drive to push storage technology forward.

- Experience with active/active high-availability embedded development with C and C++.
- Proven ability to debug complex issues including data corruption, resource deadlock, and concurrency issues.
- Knowledge of RAID data protection schemes including T10-PI and Reed-Solomon codes.
- Demonstrated leadership abilities as a ScrumMaster, technical lead, and mentor to junior engineers.
- Multiple shipped large products and features both as an individual contributor and leader.
- Ability to deal with ambiguity and changing requirements.

SKILLS

LANGUAGES	C++ (including STL, and some C++11/boost), C, C#, Python, Java
ENVIRONMENTS	VxWorks, Solaris, Linux (Ubuntu),Windows
SOURCE CONTROL	git, ClearCase, Mercurial, Rational Synergy
SPECIFICATIONS	SCSI (Primarily SBC and SPC)
TOOLS	Finisar Protocol Analyzers (Fibre channel, SAS), WireShark, GDB

EXPERIENCE

MEMBER OF TECHNICAL STAFF III
NetApp; Boulder, CO — *2011-Present*

Lead a cross-functional team of 10 engineers as both ScrumMaster and technical lead from start to ship on NetApp's declustered RAID feature named Dynamic Disk Pools for E-Series products. [http://www.netapp.com/us/technology/dynamic-disk-pools.html]

- Designed and implemented data distribution algorithm based on research from the University of California, Santa Cruz. Met strict requirements for memory usage and processor time despite having to support from 11 to 384 drives and up to 2PB of usable data in a single storage pool.
- Architected and co-implemented the background IO system for disk pooling; managing background initialization, reconstruction, and other long-running operations while maintaining host IO performance on both enterprise-class and nearline-class hard drives.
- Managed the team's forward progress on the feature while dealing with the growing pains of switching to agile and adopting several new tools.
- Avoided not-invented-here syndrome by pushing for adoption of several of the the boost libraries.
- Awarded two technical innovation awards for the development of the data distribution algorithm.

SENIOR SOFTWARE ENGINEER — *2008-2011*
LSI; Boulder, CO

Major contributor to the implementation of SCSI Protection Information (T10-PI):

- Participated from the start of development though shipment of the feature; a two year effort.
- Worked at all levels of the software stack from RAID algorithms to low-level drivers.
- Implemented methods for continuing background initialization of protection information in the event of drive failures.
- Designed and implemented performance optimized error recovery and isolation algorithms.
- Developed white-box automated test suite for error handling cases that prevented problems from escaping to the field.
- Participated in a joint effort with Emulex, Seagate, and Oracle to demonstrate protection information transmission and verification from the host application all the way to the disk drive and back again.

SOFTWARE ENGINEER
LSI; Wichita, KS — *2006-2008*

Worked on the release of a new hardware platform (E7900), tasked with doing anything necessary to keep the release running smoothly:

- Developed an automated nightly regression test for the release to avoid build breakage.
- Debugged and resolved several show-stopping data corruptions and other defects.
- Coordinated with team leaders to manage inter-team feature dependencies and stepped in to do development work and defect resolution when needed to keep the release running smoothly.

INTERIM WEBMASTER — *2005-2006*
Sterling College; Sterling, KS

IT INTERN — *2005*
Nex-Tech Aerospace (formerly Thayer Aerospace); Wichita, KS

EDUCATION

SCRUM ALLIANCE — *2011*
Boulder, CO — Certified ScrumMaster Training

STERLING COLLEGE — *2003-2006*
Sterling, KS — B.S. in Computer Science, Mathematics (Double Major)

- Attended ACM International Collegiate Programming Contest in 2004 and 2005.