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Sidney August Cammeresi IV

Summary
- Over 20 years of software engineering experience
- Master's in Computer Science
- Low-level, systems software on Linux systems
- Speak Italian (fluent non-native) and Korean (conversational)

Experience

Principal Software Engineer, MariaDB – Seattle, Washington
November 2011 – present
- Developed Xpand, a distributed, shared-nothing SQL database (formerly called Clustrix)
- Wrote multithreaded, continuation-passing C code on Linux; also wrote code in a Datalog-inspired language that was compiled by a custom, 68-phase parallelizing compiler
- Ran loosely-defined projects through research, scoping, and execution; identified unknown problems, coordinated with management, and took charge of getting problems fixed
- Reorganized execution of data-rebalancer tasks to enable 100-TB scale
- Led a team to diagnose and improve performance on a 100-node cluster
- Added secondary access paths for efficient access to introspective data in virtual tables
- Implemented complex upgrades of the system catalog (used over 40 times in 10 releases)
- Optimized storage system: multi-CPU parallel undo logging, skiplist tables
- Made problems harder to create and easier to diagnose by any means necessary: forcing granular tracking of memory allocations, disallowing improper operations
- Liaised to push other projects forward: fractional loading of probability distributions, tracking of large memory allocations, data output efficiency optimizations, in-memory logging of transaction commits
- Mentored new hires, held virtual office hours, and led a research paper reading group
- Performed code reviews and presented on best engineering practices
- Proactively monitored every single source code change to ensure every engineer was taking quality seriously; brought issues I found to the engineer and reviewer responsible

Senior Software Engineer, Quest Software – Buffalo Grove, Illinois (remote)
August 2007 – November 2011
- Overhauled low-level tools for backing up and restoring virtual machines; wrote multithreaded C on Linux, supporting output to CIFS, FTP, NFS, and SFTP

Software Engineer, Telsasoft – Minneapolis, Minnesota
August 2004 – July 2007
- Led reimplementation of an entire product line of monitoring software for cellular networks; subsystems included alarm notification, operational measurement collection, and reporting

Education

Master of Computer Science – University of Illinois at Urbana-Champaign – 2003

Bachelor's in Computer Science – University of Illinois at Urbana-Champaign – 2000

Postgraduate Diploma in Business Administration – Heriot-Watt University – 2015

Buzzwords

The languages and technologies that I have most recently and extensively used include:

C, Python, PostgreSQL, MySQL, LaTeX, Linux, OpenBSD, macOS, Git, pthreads, object-oriented design, databases, lockless data structures, continuation passing, parallel programming