
| | | |
|--------------------------------|---|--|
| Education | B.S. Computer Science, May 2012 B.S. Applied Mathematics, May 2012 | North Carolina State University Raleigh, NC |
| Professional Experience | Bronto Software/NetSuite/Oracle Senior Software Engineer, Architecture Team Developed and supported core technologies, helped cultivate standards and best practices for the department and participated in design processes with other software development teams. <ul style="list-style-type: none">• Built <i>Spew</i>, a scalable, distributed message broker backed by Redis and ZooKeeper.• Built <i>bronto-redis</i>, a Redis support library including an async Redis client built on Java NIO and an advanced reliable work queueing implementation.• Built <i>Chunk</i>, a Java framework for defining and serializing immutable records.• Built <i>TattleTail</i>, a high-throughput Spew → HDFS audit log.• Drafted outbound open-source policy and participated in launching outbound open-source pilot program at NetSuite.• Developed tooling to automate building full-stack development environments. | August 2012–Present |
| | Logos Technologies, Inc. Intern <ul style="list-style-type: none">• Debugged and repaired a custom embedded system for high-resolution image. processing.• Designed and implemented vision processing routines for TI C66xx DSPs.• Ported Kalman Filtering code from x86 with Intel IPP to C66xx DSP. | June 2011–December 2011 |
| | RootBSD/Tranquil Hosting Developer/System Administrator <ul style="list-style-type: none">• Launched RootBSD, a FreeBSD hosting provider offering virtual private servers.• Deployed and administered a Xen cluster to host FreeBSD virtual machines.• Designed and implemented a distributed application to manage VMs and Xen hosts.• Wrote FreeBSD kernel patches and performed kernel debugging.• Provided customer support via phone and email. | May 2007–July 2009 |
| Technology | Through professional and independent work I have developed experience with the following <ul style="list-style-type: none">• Languages - Java, Python, C, shell script (bash), SQL, x86 assembly, PHP• Development tools - Git, Maven, SVN, Make, Mercurial, Apache Ant, \LaTeX• Operating Systems - Linux, FreeBSD, OpenBSD, Solaris/OpenSolaris, Windows | |
| Experience | Through various projects I have developed experience with the following <ul style="list-style-type: none">• Designing and implementing highly concurrent network applications.• Distributed software/algorithm development including development with Hadoop.• Network protocol design and implementation. | |
| Other Activities | Underwater Robotics Club, NC State University President 2010-2011, Member 2009-2011 <ul style="list-style-type: none">• Designed an autonomous underwater robot <i>Seawolf</i> for the RoboSub competition.• Lead diverse group of 12-15 students as club president.• Designed and built <i>Seawolf Video Router (SVR)</i>, a high-performance, low-latency video streaming server. SVR became part of the vision processing software stack in 2011.• Designed and built hardware and software systems to allow <i>Seawolf</i> to track an acoustic pinger underwater. | January 2009–July 2012 |