

Ben Cottrell

1. Contact information

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2. Experience

Nominum Inc. — September 2011 - current

Staff Software Engineer

- Using Python with some C for performance-critical parts, built a pipeline for processing, combining, and transforming DNS and IP address data. This software handles large data sets efficiently and is used both by Nominum's internal data warehouse, and also to publish the production data that feeds Nominum security products running in customer networks.
- Wrote internal tools and library code in multiple languages to make coworkers' lives easier.
- Assisted with QA when needed.

Riverbed Technology Inc. — December 2010 - August 2011

Senior Software Engineer

- Added features and fixed bugs in Riverbed's "Cloud Steelhead" product.

Nominum Inc. — November 2006 - December 2010

Senior Software Engineer

- Helped build a hosted DNS service. The service provided both caching and authoritative DNS service, and customers could make changes either by a web-based interface or by a REST API.
- Found and fixed bugs in the Python interpreter to solve stability issues in Nominum products. Submitted patches upstream.
- Added features and fixed bugs in several other Nominum products as needed.

IronPort Systems Inc — June 2003 - November 2006

(IronPort was acquired by Cisco Systems in June 2007)

Software Engineer

- Added features and fixed bugs in Ironport's "Mail Gateway Appliance" line of products, including the SMTP protocol code.
- Worked on the peer-to-peer clustering capability of these appliances.
- Wrote tools to analyze a corpus of emails and look for patterns that could be used to distinguish spam from non-spam.

Mail Abuse Prevention System (MAPS) LLC — January 2003 - June 2003

Software Developer

- Wrote tools to improve the company's internal infrastructure.

Nominum Inc. — December 2000 - January 2003

Software Engineer

- Added features and fixed bugs in Nominum's DHCP server product.
- Found and fixed a bug in the Boehm GC garbage collector library, and submitted a patch upstream.
- Assisted with QA when needed.

Stockmaster.com / Red Herring Magazine — June 1999 - December 2000

Software Engineer

- Wrote software for processing real-time stock quote data and writing it to files that could be displayed by the company's web site.
- Found and fixed a bug in the mod_perl Apache module, and submitted a patch upstream.

Realize Communications — December 1997 - June 1999

(Realize was acquired by Stockmaster in June 1999 — see above)

Software Engineer

- Took a prototype of a proprietary key/value store database and fleshed it out, adding transaction logging and replication.
- Assisted with system administration tasks when needed.

3. Skills

- Languages: Python, C, Bourne shell, some Java
- Protocols: Experience at the implementation/wire-format level with SMTP, DNS, DHCP, SSH, LDAP, and FTP.
- My focus is on correctness and efficiency. What guarantees does the system need to make, what happens on rollback, how much locking is needed, what can be done in parallel.
- I am familiar with the Unix ecosystem, and how to take advantage of the tools in that ecosystem when appropriate.

4. References

Available on request.