

# Peter Bourgon

<http://peter.bourgon.org/cv>

I'm a distributed systems and infrastructure engineer with more than a decade of experience building large, fast, and reliable software.

For more of my values, see [my About page](#). For my work history and education, see below. For anything else, you can e-mail me, at [peter@bourgon.org](mailto:peter@bourgon.org).

2012 – now      **SoundCloud**, Berlin

On the Discovery team, I was the lead architect and engineer for search. I migrated us from Solr to Elasticsearch, rebuilt the indexing and query pipelines, and integrated machine learning models for ranking and relevance. I placed heavy emphasis on latency, operational (dev-ops) simplicity, and scalability. That infrastructure continues to power the search product today.

On the Activities team, I rebuilt the infrastructure that powers most of our time-series event feeds. At the core is Roshi, an open-source, CRDT-based distributed system for timestamped events. Several major product features, including the SoundCloud stream, are powered by Roshi.

Currently, I'm on the Infrastructure team, working on our next-gen application platform.

2010 – 2012      **IPTEGO**, Berlin

IPTEGO was a small company that made a network monitoring product called PALLADION. I contributed several protocol analyzers, including RTCP, MEGACO, DIAMETER, and RTP. In time, I moved to the core technology group, and built several distributed systems that scaled the product to continent-sized installations at major telecom companies. Eventually, I became a product manager for that group, and (among other things) was responsible for build and release management.

When I left, IPTEGO was acquired by Acme Packet. Around a year later, Acme Packet was acquired by Oracle.

2009 – 2010      Sabbatical, Johannesburg

I spent a year in Johannesburg, South Africa, volunteering for several NGOs, and contributing to open-source and personal projects.

2006 – 2009      **Bloomberg**, New York City

Bloomberg is an information services company, focusing on financial data. I was an engineer on the BLAW team, which provided research tools for corporate lawyers. I focused on BBLS, a federated (distributed) legal document search engine. I scaled BBLS from dozens to thousands of concurrent users, and from tens- to hundreds-of-millions of documents. My job involved defining and maintaining strict SLAs, system health monitoring, and code quality control measures.

2002 – 2006      **ADTRAN**, Huntsville

ADTRAN manufactures network equipment for carriers and the enterprise. I was a co-op student engineer (like a recurring internship) on several different teams. I implemented SNMP and TFTP features on embedded-class hardware, and developed multiple new features for ADTRAN's routers and switches, with an emphasis on security and VPN technologies.

2001 – 2006      **Clemson University**, Clemson

I earned a Bachelor of Science (B.S.) in Computer Engineering, which is a mix of pure Computer Science and Electrical Engineering. I emphasized software engineering and network (distributed) programming. I graduated with honors.