# TL; DR

I've worked at Google for about 6 years (net of paternity and personal leave), primarily on massive cluster- and planet-scale storage systems. I am techlead for a team of 25, whose focus is the relentless pursuit of efficiency, low retrieval latencies, durability and scale. I'm not actively seeking employment, but I'll always hear about interesting NYC startups that are trying to change the world.

# **Work Experience**

### Google

# Staff Site Reliability Engineer / Technical Lead

2005-present (including a 10-month sabbatical during 2008 for personal development) Dublin (2005-2008); New York (2008-present)

- Provided **technical leadership** ability for large team (~25)
- Communicated with **upper management** to establish priorities and metrics to measure against, and to tackle high-priority "events"
- Worked on production systems for Gmail, Google Accounts, Google Checkout, and several proprietary clustered storage systems
- Developed various tools in Java, Bash, and Python on Linux
- Worked to achieve both agility and stability while making fundamental changes to 24x7 99.99%-available low-latency distributed systems
- Helped dozens (hundreds?) of engineering teams with the design and deployment of myriad services
- Handled a huge variety of emergencies as an **on-call** engineer
- Developed critical web-based tools for exploring immense amounts of instrumentation data (AJAX, JSON, jquery, CSS2, HTML/DOM)
- Ran operational meetings, coached teammates, mentored new hires, interviewed over 160 candidates, ran continuity planning exercises
- Developed significant internal expertise on various proprietary systems for monitoring, traffic management, data storage and access, load balancing, access control, and others
- Consistent upward trajectory in performance; promoted 3 times in about five years

## Sabbatical Pembina Institute

Feb-Oct 2008 Toronto

- Helped research and frame policy for a renewable energy paper
- Edited a draft report for clarity and accuracy

### **Green Party of Canada**

Toronto; Ottawa

- Member of the executive of Electoral District Association
- Ran IT systems and helped organize during a Federal Election

#### National **Research Assistant**

#### Research Ottawa

# Council

Sep 2004 to Jan 2005 (contract) May-Aug 2002, Sep-Dec 2001 (internships)

- Simulated pioneering ideas in self-replicating continuous-space automata theory in a simple Java applet <a href="http://www.purl.org/net/johnnyvon/">http://www.purl.org/net/johnnyvon/</a>
- Performed data extraction on terms from 15,000,000 scientific papers to explore inter-gene relationships in real time (Java / Swing UI, MySQL backend)

### University of **Research Assistant**

# Oulu, Finland

Oulu, Finland

Sep 2003 to Jun 2004 (internship, contract)

- Created and deployed a flexible WML-based survey system for mobile devices
- Worked as part of a team developing a distributed, location-aware mobile services architecture, including maps, advertising, chat, and other tools (Java mobile APIs, SOAP, XML)

# Education

# University of

## **Bachelor of Mathematics Double Honours**

Waterloo

Waterloo, Canada

1999-2004

- Computer Science and Combinatorics & Optimization
- Co-operative Education (six varied 4-month internships)

## **Publications**

- Ewaschuk, R., and Turney, P. (2006). Self-replication and self-assembly for manufacturing. Artificial Life, 12, 411-433
- Smith, A., Turney, P., and Ewaschuk, R. (2003). Self-Replicating Machines in Continuous Space with Virtual Physics. Artificial Life, 9, 21-40

# **Interests & Activities**

- Long-distance and urban cycling
- International/trade economics and environmental policy
- Vegetarian cooking and nutrition, food and food politics