

SUMMARY

I am a software developer with experience and interest in domains: **large scale analytics pipelines**, and **backend web services and applications**.

TECHNOLOGIES

Languages · Python, JavaScript, Java, Ruby, Clojure, R
Backend · Django, MySQL, Hadoop, Spark, Redis, Chef, AWS, Kafka, Beanstalk, Celery
Frontend · HTML5, CSS, React, Redux
Tools · Git/Github, Emacs, JIRA, Linux

EXPERIENCE (SELECT)

Polar

Software Developer — 2011 to Present

Development Lead — 2018 to Present

- Senior software developer and development lead (non-managerial) of the core development team
- Build advertising technologies for many of the world's largest, premium publishers
- Contribute to the architecture and implementation of the full application stack, including:
 - Analytics ETL and reporting platform
 - Built with Spark on the Hadoop stack (HDFS and YARN)
 - Primary developer, designer, and maintainer of the analytics platform
 - Recently led the redesign and rebuild with Spark; it handles hundreds of millions of events per day
 - Designed with emphasis on durability, fault tolerance, and testability
 - Web applications, web APIs, and backend services
 - Built primarily with Django, MySQL, and Redis; UI is built with React/Redux
 - Recently led the design and implementation of an ad server distributed across multiple AWS zones
 - Infrastructure configuration and deployment
 - Built with Chef, managing config/deployments on Polar's infrastructure
- Review and provide feedback on the team's designs, plans, and implementations
- Ensure the team is communicating status, risks, and issues, while addressing their blockers whenever possible
- Handle application-level (non-ops) production issues
- Assist the engineering manager with hiring for development and QA roles

Xerox Research Centre of Canada

Co-op Materials R&D Research Assistant — 2007 to 2008 (8 months)

- Worked with scientists and engineers designing toner materials for Xerox's flagship printing presses
- Wrote LabView machine control software for a toner performance testing device emulating real-world conditions

EDUCATION

University of Waterloo (Canada)

Nanotechnology Engineering, Bachelor of Applied Science (B.A.Sc.) — 2005 to 2010

- Cumulative Average: 85%
- Publications:
 - D. Russo, M. Burek, R. Iutzi, J. Mracek, T. Hesjedal, "Design and development of an electronic nose sensing platform for undergraduate education in nanotechnology" *European Journal of Physics*, 32 (3), 675-686, (2011).
 - D. Russo, R. Fagan, T. Hesjedal, "An Undergraduate Nanotechnology Engineering Laboratory Course on Atomic Force Microscopy" *IEEE Transactions on Education*, Vol. 54, No. 3, 428-441 (2011).