

# NISAN HARAMATI

*Distributed Systems & Data Engineering*

## CONTACT

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(+1) 778-239-6695

## EDUCATION

Bachelor of Science, Physics (2012)  
The University of British Columbia / UBC

## DESCRIPTION

I build and maintain large scale data systems in the real-time processing space, with a focus on resilience, data quality, and correctness.

With a strong record of successful projects, I thrive in fast-paced, results-driven environments that involve:

- Working with both internal and external clients and users to identify project needs
- Taking projects from high level objectives to completion
- Delivering core value early, while still keeping in line with the long term vision
- Creating stable products that perform well, provide value throughout their lifetime, are easy to work with and are a breeze to maintain

Beyond programming and data systems, I am interested in physics, math, cooking, reading, outdoor activities, and being active in my local communities (tech and non-tech alike).

## TECHNICAL SKILLS

**Programming Languages:** C, C#/.NET, C++, Clojure, JavaScript, Ponylang, Python, R, Ruby, Shell

**Databases:** Cassandra, ElasticSearch, InfluxDB, MSSQL, noSQL, PostgreSQL, RDS, Redis, SQL

**Tools and services:** AWS, Docker, git, SVN, Continuous Integration, Continuous Deployment, Source Control, Hadoop, Storm, Spark, Puppet, Chef, IIS, Linux

**Methodologies:** AWS, Chef, Continuous Deployment, Continuous Integration, Docker, git, Hadoop, IIS, Linux, Puppet, Source Control, Spark, Storm, SVN

**Specializations:** Big Data, Complex Event Processing, Containerization, Data Engineering, Data Systems Architecture, Database Design, Distributed Algorithms, Distributed Data Systems, Greenfield projects, Infrastructure, R&D, Site Reliability Engineering, Stream Processing

## TRANSFERABLE SKILLS

**Languages:** English (fluent), Hebrew (fluent)

**Communication & People Skills:** Code reviews, design reviews, documentation (internal and external), interviewing and assessing potential candidates, product and feature advocacy, project proposals, public speaking, sales engineering, technical assessments, technical leadership, technical writing, third-party communications, troubleshooting

**Project Management:** Agile methodologies, comprehensive and adaptive planner for project targets, delivery, estimates, executed short and long term projects throughout their full lifecycle (conception, planning, reviews, scoping, roadmap, estimates, delivery, maintenance, upgrades, and sunseting)

**Assets:** Clear and organized leadership style, collaborative team contributions, efficient and well-paced task management, enthusiastic teacher and learner, independent self-starter, thorough diagnostic skills, user-driven perspective

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### WORK EXPERIENCE

**Distributed System Engineer, Chaos Engineer**  
Walloo Labs | Dec. 2015 to present

- Core contributor to Wallaroo, an open source, high-throughput, low-latency distributed real-time event processing framework written from the ground up in the Pony language.
- Worked on core functionality, testing & verification, metrics, telemetry, and instrumentation
- Built an end-to-end model-driven testing harness enabling chaos engineering, fuzzing, and generative testing
- Designed and implemented a distributed testing and property verification system for Wallaroo, allowing for rapid generation and execution of tests over thousands of topologies
- Performed R&D in testing and verification of distributed systems, using both empirical and formal method which helps improve the resilience and reliability of Wallaroo

**Platform Engineer**  
Counsyl | Sep. 2014 to Nov. 2015

- Redesigned the data systems architecture throughout the organization, reducing hardware footprint and enabling audit-ability and fine grained access control as required by HIPAA
- Created database systems automation for deployment and administration, reducing maintenance and recovery related downtime
- Updated the data systems architecture and configuration to meet HIPAA compliance

**DataOps Team Lead**  
plentyoffish.com | Jun. 2015 to Aug. 2015

- Established and lead the data ops team in developing and supporting the data systems at POF, which enable the IT, product, customer support, marketing, and executive teams to excel at each level
- Oversaw projects and ensured alignment with other teams in the organization
- Mentored junior team members to help advance their skills in software and data system design principles
- Coordinated cross functional projects and skills sharing with other teams, and helped develop data-driven product development methodologies

**Senior Software Engineer, R&D, Data Science**  
plentyoffish.com | May 2010 to Aug. 2015

- Designed, built and administered the monitoring, analytics, dashboards, and operational alerts stack, enabling the IT team to prevent service failures and outages
- Researched and implemented full end-to-end systems (CDN origin service, data backend for analytics, data backend for data science, distributed real time data collection and processing system), reducing service layer costs and enabling new data driven business opportunities
- Set up and administered multiple database clusters in a low-latency, heavy load environment (PostgreSQL, MSSQL, Cassandra)
- Developed a distributed and fault tolerant execution cluster for R code that ran the bot detection and social network-based predictions algorithms
- Built a high performance JavaScript rendering engine for real-time animated feeds
- Developed test automation tools for Android phones