

Avishalom Shalit (vish)

Tech Lead, Sr. Manager & Team Builder for Data Science/Data Eng. avishalom.shalit@gmail.com
ML Algorithm Developer; Staff Data Scientist; Senior SWE 226-989-4899 (or 42-42-55-vish)

SUMMARY OF QUALIFICATIONS

- Proven hands on and managerial ability to transform **innovative** research **ideas into products**.
- **Built, managed high performance data teams**. (Data science, Analytics, Data engineering).
- **Goal oriented** - Deliver working projects, while keeping cloud costs in check.
- Experience applying **ML and NLP** techniques to large scale real world data.
- Development of **live** financial trading systems. Paper trading as well as **real money**.
- I love **Python, Go**; expert **SQL**; experienced in **Java, C++**, and **MATLAB**. (and AWS, DBT).

PROFESSIONAL EXPERIENCE

10/2019 – 04/2020: Carta Data Science/ML Sr. Manager. Waterloo, ON

(Kik was bought by Carta, a digital equity management firm in 10/2019)

- **Led** the Data Science and Analytics team. Took lead on data compliance and governance processes.
- Launched new data products in alignment with various business units.
- Rolled out **best practices**. Including unit and integration tests for data and code health rewrites.

6/2018 – 10/2019: Kik Data Science & Data Eng. Tech Lead & Manager. Waterloo, ON.

Kik was the first messenger app to bridge Blackberry and iPhones. It had many millions of users

- **Built** the Data Science team (from 1 to 7 people). Revolutionized **hiring** practices with great results.
- **Lead and Managed** Data Science: Analytics, ML, and backend AI algorithm development.
- **Lead and Managed** Data Engineering: In charge of ETL, governance, compliance and efficiency.
- Redesigned the ETL process; **Resulted in \$X,000,000** savings without compromising deliverables.
- Redesigned **testing** methodology; making data science central in product decisions and design.
- Built a framework for (Granger) causality studies to measure the effects of user experiences on retention, this is used to guide strategic decisions in many parts of the org.

9/2014 – 6/2018: Google Senior Software Engineer. Waterloo, ON, Canada.

Google Content Ads + Firebase developer tools

- Owned data integrity project aligning training and serving features in an ML ad pricing model.
- Feature engineering: implementation / eval for new features in model.
- Rewrote the experiment reporting system to validate rollout of new features/model, identify outliers.
- Designed and implemented the backend server for several Firebase Developer tools.

Community Contributions.

- 2015-2018 Led "train the teachers" workshops for CS education. Instructed over 200 teachers; affected thousands of students. Trained up fellow employees to facilitate workshops.
- 2017-2018 Led a practice group for Compassionate Communication (NVC) for fellow employees.

3/2011 – 7/2014: Persado - Head Algorithm & Analytics. London, UK; then NYC

Persado (spun off Upstream) develops marketing solutions for clients that in turn have hundreds of millions of customers. Typically, effectiveness of ad campaigns is doubled, with revenue increase in the million dollar range. Persado pioneers the field of marketing language engineering.

- Led **research** team (algo, ML, stats) in a business environment: Semantic exploration, mapping, clustering of the global ad space, as well as behavioural studies, e.g. reactivation of dormant users.
- Initiatives I led and worked on resulted in increased client revenues **totaling millions of dollars**.
- Met and communicated **due diligence** requirements in a first funding round, in which we **secured significant funding** for our continued expansion/spinoff. Persado(in NYC)

5/2009 – 3/2011: Sentigo.com - Head of Algorithm Development.

Sentigo.com (formerly Bulloonz) provides aggregated sentiment and news data pertaining to financial assets. Data are collected from myriad online sources, giving insight to the true market zeitgeist.

- Developed methods for the analysis and presentation **of quantitative and semantic data** from user generated content on a myriad of sources, including an in house machine learning solution.
- Designed and developed *hot* topic extraction, semantic **models** and document clustering methods.

2005–2009 Freelance Consultant; Algorithm Developer and Programmer

- Formalized Clients existing trading concepts and ideas **into testable strategies, with ML.**
- Programmed, tested and supervised live **automated** trading programs trading **real money.**
- **Consistently delivered** fully functional and thoroughly tested systems.
- **2008/9 Private forex investment group. Algorithm and software dev.**
Aided development of strategies, and coded into a **live (real money)** auto trading solution.
- **2008 Collarity – online content personalization,** researcher and **algorithm developer.**
Developed **new approaches** to behaviour + semantic (LDA based) co-clustering.
- **9/2007 – 4/2008 Online Sports Betting markets** Chief researcher, algorithms & SW dev.
Built an **automated trading system** managing a live trading account on betting exchanges.

5/2005 – 1/2006 Startup hedge fund - Chief researcher and **algorithm** developer
Research and development of financial indicators in for auto trading the commodities market.

TEACHING EXPERIENCE

2001 – 2007 Instructor, Open University, Computer Science Department
Teaching Assistant, Hebrew University, Jerusalem

- "Algorithms"
- "Automata and Formal Languages"
- "Neural Networks I", graduate course, developed lectures and exercises.
- "Emergence of Complexity", research seminar.

EDUCATION

2002 – 2008 PhD studies(all but dissertation.) **Neural Computation**, ICNC, Hebrew University.

- Model cortical networks with high density EEG & Prediction markets collaborative computation
- Ormut Scholarship (**merit** based) for **Neural Computation**

1999 – 2002 Hebrew U. Double Major B.Sc. **Physics & C.S. - Natural Sciences Honors Program.**

- Graduated Summa Cum Laude. GPA: **98.15 +** Various Prizes (Intel-Dean, Dean's list)

PUBLICATIONS & PUBLISHED PERSONAL PROJECTS

- "Modeling tinnitus (auditory hallucinations) using an adaptive recurrent network." (**+award**)
- "**Predicting predictions:** in-play bet prices are practically predetermined"
- "Postext-A Mind for Society" A. Shalit et al.; Adaptive Agents and Multi-Agents Systems II(2005)
- Animated Captcha. <http://eppur-si.appspot.com>, implemented web service + patent.

MILITARY SERVICE (Mandatory)

1992 – 1999 Air-Force, **pilot** and **captain** of cargo aircraft

MISC.

- ~100 Hang-glider flights, ~150 Scuba dives, 8 skydives. Lived and worked in 5 countries.
- Everybody calls me 'vish', short for **Avishalom**. It rhymes with "quiche" (and "niche").