

Avishalom Shalit (vish)

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I enjoy deriving meaningful, measurable, and actionable insights from data.

I have successfully done so on a wide range of inputs and data sets including: financial and betting data, online text clustering and sentiment mining, browsing habits and topic personalization, and user commercial behavior patterns and automated marketing phrasing. I am a data scientist, algorithm developer, expert MATLAB programmer and research team leader, with hands on industry R&D experience.

I lead and take an active role in key projects that increase revenue by millions of dollars, and develop the core I.P of the company.

SUMMARY OF QUALIFICATIONS

- Extensive experience as a researcher, data scientist, hands on algorithm and product developer
- Goal oriented - experiment designs and data explorations focused on increasing revenue
- Proven ability to transform innovative research ideas into products
- Application of machine learning and text mining techniques to large scale real world data
- Development of live (real money) financial trading systems
- Expert MATLAB programmer. Fluent in perl, python, Java, C++, SQL
- Summa Cum Laude, double major B.Sc. , Physics & Computer Science, Hebrew University
- Studies towards a PhD in Neural Computation at th Hebrew University (All but Dissertation.)
- Teaching experience, including graduate level courses at the Hebrew U., and Open University.

PROFESSIONAL EXPERIENCE

3/2011 – Present: Persado (spun off Upstream), Head Algorithm & Analytics

Persado 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.

- Took leadership and key role in designing, implementing and analyzing extensive experiments. The insights from these resulted in increased revenues for clients **totaling millions of dollars**
- Instrumental in preparing the technical side of the **due diligence** requirements in a recent funding round, in which we **secured significant funding** for our continued expansion/spinoff.
- Leading a team of algorithm developers and statisticians; **research** in a business environment.
- **Initiating and actively participating** in data-exploration, extraction of insights, intellectual property development, design of tests and experiments, and subsequent strategic changes.
- Designed and managed an internal operational knowledge base and **streamlined workflow** of other departments within the company by identifying and optimizing the weak points in the work processes, and by designing solutions, both in software and in process to alleviate them.
- In charge of semantic mapping and auto exploration and clustering of the global ad space.

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 work on both an external sentiment analysis solution, and an in house machine learning solution.
- Designed and developed topic extraction, semantic **models** and document clustering methods.
- Implemented and integrated temporal n-gram topic extraction as a "hot topics" feature.
- **Designed and authored** prototypes as well as production components.

2005–2009 Freelance Consultant; Algorithm Developer and Programmer

- Worked with clients to formalize existing trading concepts and ideas **into testable strategies**.
- Programmed, tested and supervised live **automated trading** programs trading **real money**.
- Applied various **machine learning** techniques to optimize strategies
- Integrated with **various** different systems and APIs in C#, C , JAVA, perl.
- **Consistently delivered** fully functional and thoroughly tested systems

Main Contracts:

11/2008 – 5/2009 **BSD software, Private forex investment group**

- **Chief** algorithm developer, researcher and software developer.
- Identified and **automated** key ideas in client's existing manual trading systems.
- Aided development of strategies, and coded into a **live (real money)** auto trading solution.

7/2008 – 11/2008 **Collarity.com – online content personalization.**

- Researcher and **algorithm developer**
- Developed and optimized **new approaches** to browsing-behavior based user/content clustering and user/content categorization in addition to semantic (LDA based) clustering.
- Developed new metrics for co-clustering the **co-visitation graph** (i.e. inferring related users and related content based on the browsing history).

9/2007 – 4/2008 **S.O.M.M, private investors, online sports betting markets**

- Chief algorithm developer, researcher and software developer.
- Adapted client's methods for hedging sports betting to create an automated trading system managing a live trading account on betting exchanges.

5/2005 – 1/2006 **'Convexus Advisors' - SF based startup hedge fund**

- Chief **algorithm** developer and researcher, developed novel strategies and financial indicators.
- Performed extensive statistical **research** on financial indicators in the commodities market.
- Coded **new indicators and strategies** into existing trading frameworks.

TEACHING EXPERIENCE

2004 – 2007 **Teaching Assistant, Hebrew University, Jerusalem**

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

2001-2004 **Instructor, Open University, Computer Science Department**

- "Algorithms"
- "Automata and Formal Languages"

EDUCATION

2002 – 2008 PhD studies, **Neural Computation**, ICNC, Hebrew University, Jerusalem. (A.B.D)

1999 – 2002 Hebrew University, Double Major B.Sc. **Physics & Computer Science**
"Amirim" **Natural Sciences Honors Program**, graduated summa cum laude.

PUBLICATIONS & PERSONAL PROJECTS

- **"Predicting predictions:** in-play bet prices are practically predetermined" (presented at: *Symposium on Gambling, Prediction Markets and Public Policy, Nottingham Trent, 2008*; and *The European Conference on Complex Systems, 2008*)
- "Posttext-A Mind for Society" A. Shalit et al.; Adaptive Agents and Multi-Agents Systems II(2005)
- Implemented the system described in the "Posttext - A Mind for society" at <http://complexity.huji.ac.il/> - an EU commissioned complexity-science-community mapping and **collaboration tool**, a wiki with a built in real time interactive concept maps.
- A moving Captcha. <http://eppur-si.appspot.com>, a new idea and a web service for **animated captchas**. **Patent pending**

HONORS

2005 M.Sc. Seminar: "*Modeling tinnitus (auditory hallucinations) using an adaptive recurrent network.*" won "Faculty Day", Poster-contest award **and cash prize**

2002-2004 Ormut Scholarship (**merit** based) for **Neural Computation**

2002 Dean-Intel prize for **Excellent Academic Achievements**

1999-2002 B.Sc. Honors program; **Summa Cum Laude**, GPA: **98.15**

1988-1992 Placed and won several math and physics competitions (some international).

MILITARY SERVICE

1993 – 1999 Israeli Air-Force, **pilot** and **captain** of cargo aircraft

1992 – 1993 NCO in an elite **Intelligence Corps** program