
Professional Experience

- May 2013–Present **Security Intelligence Software Engineer**, *Juniper Networks*, San Francisco, CA.
Designed and implemented a unique malware analysis and identification solution utilizing machine learning and static analysis for Juniper Sky Advanced Threat Prevention;
Created machine learning models to identify, analyze and cluster malware;
Developed a data acquisition and storage pipeline that is used to acquire new software samples, extract metadata and develop new statistical models for malware identification;
Implemented a hardened platform-independent solution for authenticode certificate metadata extraction and certificate validation.
- Jan 2012–Feb 2013 **Web Developer/Consultant**, *Genesis21, Inc*, Brooklyn, NY.
Consulted on Amazon Webstore and Ebay Marketplace integration;
Consulted on unified product database design and implementation;
Automated marketplace product posting.
- Oct 2011–Sep 2012 **Bioinformatics Analyst**, *Stony Brook University*, Stony Brook, NY.
Used machine learning and statistical techniques to computationally identify sequence motifs (short nucleotide patterns) in herpesvirus and mouse genomes;
Statistically analyzed microarray gene expression data to determine motif significance.
- Dec 2011–Feb 2012 **Research Assistant**, *Stony Brook University*, Stony Brook, NY.
Evaluated the algorithmic efficiency and accuracy of DOCK's de novo ligand construction;
Statistically evaluated the computational performance and accuracy of current molecular similarity techniques on large datasets of small molecules.
- May 2010–Jan 2011 **Research Technician**, *Albert Einstein College of Medicine*, Bronx, NY.
- Aug 2008–Dec 2009 **Research Fellow**, *Brookhaven National Laboratory*, Upton, NY.

Computer Skills

Programming Langs	Python, Java, C, Matlab, R, SQL, Nim, L ^A T _E X
Web Development	Django, Flask, Bottle, HTML, CSS, RabbitMQ
Databases	PostgreSQL, MySQL, Redis, LevelDB
AWS	EC2, S3, Aurora, RDS, VPC, SQS

Education

- Sep 2011–Dec 2012 **MS Applied Mathematics**, *Stony Brook University*, Stony Brook, NY.
Sep 2010–Dec 2010 **Graduate Biochemistry**, *Albert Einstein College of Medicine*, Bronx, NY.
Sep 2004–May 2009 **BS Biochemistry**, *Stony Brook University*, Stony Brook, NY.

Presentations

- Sinayev, R., Michaelides M., Delis F., Piyis Y.K., Wang G.J., Volkow N.D., Thanos P.K. (2009).
Age- and Diet-Related Changes in Dopamine Transporter (DAT) Binding in Obese Leptin Receptor-Deficient Rats. *Society for Neuroscience*, Chicago: Poster DD-56.
- Santana, A., Bulaklak, K., Cheng, B., Sinayev R., Krug, L.T. (2012).
Investigating the role of NF- κ B in the regulation of MHV68 gene expression. *International Congress on oncogenic Herpesviruses and Associated Diseases*, Philadelphia.

Publications

- Santana A.L., Oldenburg D.G., Kirillov V., Malik L., Dong Q., Sinayev R., Marcu K.B., White D.W., Krug L.T. (in review).
LPS/TLR4 Signaling Enhances RTA Occupancy of the Origin of Lytic Replication during Murine gammaherpesvirus 68 Reactivation from Latency, *Pathogens*