

WORK EXPERIENCE

July 2017 – July 2019

Collective Health, San Francisco, CA

Data Engineer

- Built a prototype health benefit enrollment billing job in Python.
- Making ORC and Parquet files for S3 to back a Hive/Presto/Looker data warehouse.

October 2013 – March 2017

BSSP (Butler, Shine, Stern & Partners), Sausalito, CA

Data Scientist

- Developed and maintained data pipelines for full service marketing engagements with Python / MySQL / HDFS / S3 / Hive / Drill / Spark on collocation and AWS EMR.
- DoubleClick, DataXu, CrimsonHexagon, MediaOcean API, integrations.
- Developed cost calculations for fine grain/high dimensional marketing channel analysis.
- Developed and maintained analytics dashboards with PeriscopeData, Jupyter and Zeppelin dashboards (numpy, pandas, matplotlib, plotly, ...).
- Analyzed campaigns for funnel and creative optimizations.
- Developed sales and activity forecasts using Bayesian GLMs, Decision Trees, and Keras LSTMs.
- Analyzed experimental tests to determine best programmatic vendors, television spots, web banners, newspaper inserts, etc...

October 2010 – May 2013

Sensor Analytics, Inc., San Francisco, CA

Software Engineer

- Developer for an NSF SBIR funded startup to develop semiconductor manufacturing inspection sampling automation software.
- Developed a Java EE / c++ / MATLAB based application to tie together a complex event processing system, integrated MATLAB analytics.
- Integrated MongoDB for faster analytics to support fast Bayesian inference.

August 2008 – August 2010

Loyalty Lab, Inc., (now Tibco) San Francisco, CA

Operations Engineer

- Designed and implemented custom client requirements on a professional services basis in SQL/Python.
- Wrote custom SQL/Python data fixes for production databases due to client mistakes and software bugs.
- Supported REST and legacy SOAP APIs for new clients.
- Assisting account management with research, reporting, application troubleshooting using MS SQL on a multi-tier MS .Net platform. I advocate Linux.
- Provided general application level operational support/getting paged 300 times a night for days on end and fixing bugs and issues in near real time to meet multimillion dollar SLAs in exchange for free beer at a pool table with a downtown high rise view.
- Created and maintained inbound and outbound data integration projects utilizing custom XML, XSLT, Python scripting.

June 2006 – April 2008

Advent Software, Inc., San Francisco, CA

Custom Reports Engineer

- Produced customized financial reports for investment managers on APX SQL based portfolio accounting platforms on a professional services basis.
- Consulted with the clients to develop technical and functional specifications, bidding the project, coding and testing the report scripts, and working with the client to debug and maintain the final product.

March 2004 – June 2006

Systat Software, Inc., San Jose, CA

Technical Coordinator

- Cold/warm/hot calling PhD level scientists by the thousands to talk about statistical software and sell software products that came in boxes.
- Provided product training, seminars, and demonstrations to current and prospective customers.
- Conducted customer surveys to guide new software development.
- Managed Google AdWords and Yahoo Overture search engine marketing campaigns.
- Managed Salesforce and Goldmine SQL based sales databases.
- Produce Flash product demonstrations for website.
- Managed trade shows to promote the company and it's products.
- Managed CD/manual/box production back when software was transported by FedEx.

June 2002 – January 2004

Texas A&M University, College Station, TX

Department of Physics

Graduate Research Assistant

- Assisted in design and construction of a laser isotope separation plant for Mercury extraction with the goal of demonstrating financial feasibility for the production of more efficient fluorescent lamps. The actual research motivation was for a defunded EPR experiment.
- Developed C++ and LabView based applications to control the system of valves, pumps, lasers, uv lamps, and heating tapes with feedback from numerous pressure, temperature, and optical sensors.

EDUCATION

Master of Science in Mathematics

Texas A&M University, College Station, TX

December 2003 G.P.R.: 3.235

Bachelor of Science in Physics

Minor in Mathematics, Cum Laude

Texas A&M University, College Station, TX

May 2001 G.P.R.: 3.569