

## **Tristan Reid**

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### **Summary**

- Data Scientist & Quantitative Analyst with experience leveraging Big Data using Java, Scala, Python, Matlab and other tools (5 years)
- Developer and team leader specializing in data analysis, modeling complex ideas, and web technologies, experience with analytical programming on diverse platforms, Java, C#, Python, SQL, Javascript, etc. (12 years)
- Teaching enterprise technologies for companies like IBM and BEA Systems (3 years)
- Subject matter expertise in finance, risk analytics, media and marketing: Chartered Financial Analyst, 10 years of software development for fixed income investment management

### **Employment History**

#### **Hulu (Santa Monica, CA)**

April 2013 to present

#### **Senior Software Development Lead - Data Science**

June 2014 to present

- Hands-on leader of data science team
- Find insights in data, create compelling interactive visualizations, and build framework for reproducible research
- Machine learning and statistics for modeling business problems: clustering, classification, regression, density estimation, visualization
- Churn model for financial planning and promotion attribution, using survival analysis (Kaplan Meier estimator, Cox Proportional Hazards, Aalen additive model)

#### **Senior Software Development Lead - Metrics & Reporting Tools**

April 2013 to June 2014

- Manage a team of 4 developers, spending most of my time (80%) writing software
- Build tools for Hadoop platform, investigate alternative methods of processing Hulu data. Python, Scala and JS libraries such as JQuery, KnockoutJS, and D3
- Built primary dashboard of MetStat; a monitoring tool for the beacon-processing data pipeline, including ingest, MapReduce jobs on our Hadoop cluster, and various services related to aggregation and publishing to SQL and MySQL databases
- Improved and supported RP2; a reporting tool that dynamically creates queries across 17 SQL and MySQL data servers at Hulu, and can also run Hive queries
- Designed and led development of RP2Monitor; a monitoring tool backed by a graph database to tracking reporting resources through the data pipeline

#### **Ares Management, LLC (Century City, CA)**

March 2010 to March 2013

Vice President of Solution Design January 2012-Present

Associate Vice President - January 2011 - January 2012

Senior Technologist - March 2010-January 2011

- Design and prototype new systems for research management and business intelligence. C#, SQL, Javascript, CRM, Business Intelligence tools
- Implemented fixed-income analytics calculation platform, with nightly batch reports and ad-hoc calculator supporting scenario analysis and valuations. Replaced a system with less functionality while saving the company license fees of \$50K/year (C#, SQL, FinCAD)
- Designed and managed implementation of a research portal tool to aggregate data from various back-end systems, and to tag and store unstructured data such as emails and documents, with contextual presentation of tagged research
- Migrated multiple business lines simultaneously to new CRM system and custom Deal Relationship management tools (xRM). Implemented data integrity program. Replaced license fees of \$250K/year product with fewer than 20 active users with a hosted tool costing \$80K/year used by >100 people (and growing rapidly), plus savings in server hardware and maintenance (Microsoft Dynamics CRM, Outlook VBA, C#, SQL, SSRS)

### **The Capital Group Companies, Inc. (West Los Angeles, CA)**

November 2003 to February 2010

Quantitative Research Associate - December 2007-February 2010

Senior Technologist- IMS - April 2006 to December 2007

Technologist-Fixed Income Control - November 2003 to April 2006

- Implemented analytics and risk management tools, designed and implemented risk and pricing models (Java, C#, SQL, Matlab, Javascript, AJAX, ASP.Net, Python, POINT, Bloomberg, Polypaths)
- Took over a Python analytics toolkit with >40K lines of code, refactored to <4K while adding functionality
- Developed applications for the Fixed Income Control team (Java, C#, ASP.Net, SQL, Java Authentication and Authorization Framework, Weblogic, Autosys, Excel VBA)

### **Western Asset Management (Pasadena, CA)**

May 2002 to November 2003

Senior Software Developer-Core Team

- Lead developer of high-performance fixed-income trading system: ATP (Advanced Trading Platform), with native P/Y calculations, and integration with Bloomberg. Optimized performance of O.R. Mapping from >3min per trade to <1 sec (Java, JNI, C, SQL, TopLink)
- Supported various ad-hoc analytic data analyses for the F.I. Analytics Team (Excel, VBA, SQL)

### **Vercel Corporation (Calabasas, CA)**

February 2002 to May 2002

- Created a custom UI for a Linux mobile device (Java, C++, TrollTech Qtopia, Lineo Embeddix)

### **Mamisi Digital Media Services (Hollywood, CA)**

December 2001 to February 2002

- Implemented a distributed media solution for movie shoots, including Real-Time MPEG2 Encoding capture and simultaneous broadcast of a streaming feed (Java, C++)
- Created a synchronization mechanisms for digital movie cameras, implemented a serial protocol to access a hardware timing system and directly accessed video-taps on movie sets to control the capture, encoding and decoding processes (Java, JNI, Java)

Communications API)

### **Quietly Creative Designs, LLC (Venice, CA)**

March 2000 to October 2001

- InvestmentToolkit.com, a set of graphical tools for equity research and portfolio management (Java, ASP, SQL)
- Improved a high-performance S&P Comstock data retrieval protocol featuring automatic error-checking and recovery (C++, SQL, ODBC)

### **USAMedia (Chapel Hill, NC)**

August 1997 to December 1999

- Software development and training services, clients included: Bea Systems, IBM, Duke University Medical Center, LearningPatterns.com, International Technology Solutions, Prosoft
- Instructor for IBM-s E-business Application Development classes in US, Europe and India

### **Education**

- Duke University, Durham, NC B.A. in Computer Science, 1997
- Columbia University coursework in Applied Mathematics 2006
- Suffolk University coursework in Vector Calculus, Differential Equations 2007-2008
- University of Illinois coursework at Urbana-Champaign Python Programming (4 course series) 2012
- Centro De Lenguaje Latina Spanish Immersion, Quetzaltenango, Guatemala 1994

### **Certifications**

- Chartered Financial Analyst - Completed all 3 levels, awarded the CFA Charter in 2006
- Federal Communications Commission (FCC) Amateur radio license - Technical Class & General Class, 2011

### **Writing**

Freelance writing, contributed chapters and/or sample code to the following titles. On the first I'm the author, on the others I was listed in acknowledgements:

- Reid, Tristan. *Server Side Scripting and Security*, Prosoft Training; 1999. (textbook for PHP, Perl, Server-Side JavaScript, ASP, Encryption) ISBN-13: 9781581431827
- Danks, Brian. *Dynamic Server Pages Prosoft Training*; 2003. ISBN: 1-59302-038-4
- Bell, Mark. *The Mac OS 8.6 Book*, Coriolis Press; 1999. ISBN 0-12-445606-5
- Bell, Mark, Suggs, Deborah. *Mac OS 8.5 Black Book*, Coriolis Press; 1999. ISBN: 1576103048
- Smith, Dori *Java: For the World Wide Web*, PeachPit Press; 1998. ISBN 0-201-35340-7
- Bell, Mark. *BEdit for Macintosh*, PeachPit Press; 1998. ISBN 0-201-69659-2