John Folkers

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Summary

Data Scientist with 3+ years of data modeling experience on game related data. Generalist and consumer of analytics and infrastructure products.

Analytics

Data Science Platforms:
- Databricks
- R
- Rapid Miner
- Splunk

Graph Databases:
- Graphistry
- GRAKN

Machine Learning:
- H2O

ML Explainers:
- DALEX

Knowledge

Each square is one year

Data Science

Databricks Spark

Descriptive Stats

Feature Engineering

Inferential Stats

Machine Learning

SQL & Databases

Experiences

ZENIMAX MEDIA
Austin, TX – June 2018 to 2019

Lead BI Analyst, Data Science Team – Cross-Game Studies & Social Media

- Developed new binary Classification models from scratch to study cross-game retention between early ESO and Fallout 76 which had never been done before
- Completed comparison of 18 models which included 100s of Decision Trees in Distributed Random Forests (DRF), several Generalized Linear Models (GLM), Gradient Boosting Machines (GBM), XGBoosts, Deep Learning Models, and Super Learner Stacked Ensembles on over 1.8 million ESO players in less than a week to find the best model
- Performed testing of eight different overlapping features between ESO and FallOut76 and gated the model development
- Increased throughput of model training and testing by 600% and number of simultaneously running models by 1800% in one day by using H2O to split data sets, run models in parallel, and find most important modeling features
- Resolved two social media data problems related to outsourced 3rd party data sources (e.g. VanillaForums, LevelUp, etc.) and gave next steps on a third issue by driving resolution on issues related to APIs on ESO's VanillaForums
- Negotiated custom APIs with LevelUp's founder just for ZeniMax to be able to deliver better results through APIs than available through methods using the web UI tool
- Identified to stakeholders several methods for Google Analytics API data enrichment for social media and marketing purposes
- Studied id software's Quake Champions during the Free-To-Play Launch for outliers on player behavior using basic descriptive statistics
- Created two Infographic data sets for Community on id software's Quake Champions

ZENIMAX MEDIA
Austin, TX – July to August 2018

(Dual Role) Splunk Subject Matter Expert – Fallout 76 & Bethesda.net

- Principal architect and responsible for designing Splunk's Statement of Work at Bethesda.net – responsible for ensuring the project scope (initially just FallOut76) – with Bethesada.net also added – is completed on time and with high performance
- Built one of the world's fastest Splunk instances exceeding search results returned of over 1MM per second in the Splunk UI in an enterprise environment with over 3,600 CPU cores and 1.5 PB of NVMe SSD instance storage
- The project was completed six months ahead of schedule with both Bethesda Game Studios and Bethesda.net onboarded before EOY 2018 with no measurable performance degradation
- Performed over 100 hours of Disk IOPS testing using three different instance types in AWS configured for both instance storage and EBS mount points

ZENIMAX MEDIA   Austin, TX – July 2017 to June 2018

Lead BI Analyst, Business Systems – id software Quake Champions
- Authored the entire gameplay data schema for id Software's Quake Champions. It was then implemented by devs and ingested by BI engineers
- Defined data collection points on player movement, heartbeats, rewards, pickups, medals, scores, mouse control clicks, menus, hardware signatures, and inventory
- Enabled player and game analysis for a 360 view by analysts, data scientists and stakeholders. This was put into live production in time for Early Access Launch
- Managed many forensics requests coming in on potential cheaters during id software's Quake Champions Early Access from Customer Service, stakeholders at the id software studio, Community HQ, and the eSports Manager.
- Resolved issues to requests several times during hot real-time eSports competitions (even while they are going on) to identify players, their previous play time and any aliases used.
- Performed forensics to identify suspected hacking players in videos, and to resolve questions where anti-hacking tools failed
- Created custom sales and marketing data analyses by area territories for UK ZEL Sales Office and in HQ for Community, Marketing, and Brand stakeholders
- Considered by many stakeholders as the go-to-resource for Quake Champions when the scheduled reports were not enough and the need by stakeholders ranged from a simple ad hoc to a custom advanced request for any topic

ZENIMAX MEDIA   Austin, TX – January to July 2017

Game Analyst, Business Systems – id software Quake Champions
- Designed gameplay analytics data schema for id software's Quake Champions
- Performed ad hoc requests for Customer Service, id software, HQ Business Management Team, Brand, Marketing and Community
- Performed one-on-one interviews with key stakeholders several times by traveling up to id software in Dallas, TX
- Used a wide variety of technologies in Databricks
- Provided internal review feedback to the Businesss Management Team on DeltaDNA as an automated BI subsystem and A/B testing integrated with the game

ZENIMAX MEDIA   Austin, TX – August 2016 to January 2017

Business Intelligence Engineer, Business Systems
- Supported new BI Engineering Systems
- Performed Databricks administration
- Supported Databricks users
- Contributed to development of Dimension and Fact tables in the Data Warehouse
- Contributed to Redshift design and development
- Supported Pentaho jobs
- Contributed to BI's use of AWS S3 storage design, standards and processes

BETHESDA.NET
Austin, TX – October 2013 to August 2016

Splunk Architect, Security Team – Elder Scrolls Online & Bethesda.net
- Principal Splunk Architect and General Splunk Performance Engineer for Splunk at ZeniMax family of companies for Customer Service, Customer Service Tools Team, Security, Bethesda.net, Zenimax Online Studios, id software (DOOM 2016), AWS customers with several different fleets of Splunk forwarders, Battlecry Studios, and all manner of hybrid engineering feats and solutions as needed by management
- Scaled out Splunk to tens of thousands of AWS forwarders
- Deployed a hybrid solution that fed to Splunk enterprise on-premise solution via F5 port forwarding saving several $1000s in the cost of AWS VPCs to the datacenter every month and saving in complexity by keeping it simple
- Maintained and Upgraded four different Splunk systems (ESO – North America, ESO – Europe, AWS Splunk Forwarders, and ZOS dev studio)
- Migrated Bethesda.net to Splunk
- Authored numerous documents in Confluence describing the full life-cycle of data in Splunk, Splunk's Architecture, and How-To's as well as Best Practices
- Authored the NOC Run-Sheet defining what is a P1, P2, and P3, when to call whom, and how to access systems
- Splunk SME to HQ ZMI Security

VARIOUS
Phoenix, AZ – November 2012 to September 2013

Engineering Technical Lead
- Held various roles at various companies including: Customer Onboarding Engineer, Call Center, and Splunk Engineer

SPLUNK
June 2011 to October 2012

Professional Services, Splunk Employee
- Professionally deployed Enterprise Splunk and migrated presales Splunk Proof of Concepts to full blown production as a Splunk Employee to various customers on-site (Best Buy, Fidelity, State Farm, Infoblox, Service Now, Apollo Group, Georgia Tech, FAA, Rolls Royce, etc.)
- Trained customers in Splunk Best Practices
- Trained and Mentored many new Splunk PS employees and contractors while leading a live deployment

UGI
Reading, PA – December 2008 to June, 2011

Sr. Network Architect, IT – State of Pennsylvania
- Deployed and supported Cisco and Splunk and SolarWinds

VERIZON
King of Prussia, PA – April 2005 to June 2008

Network Engineer, Tier 3
- Supported over 3,000 customers on Cisco Networks

Education

Business Science University (MOOC)   Online MOOC

Coursework
- Business Analysis (R Track)
  - Data Science Foundations
- Data Science For Business (R Track)
  - Machine Learning & Business Consulting
  - Advanced Machine Learning

Columbus State Community College   Columbus, OH

Associate of Science Degree (AS) *Computer Programming*, Computer Science Department
- Graduated with Honors

Computer Networks Specialization – *Networks Specialty*, Computer Science Department
- Graduated with Honors

Data Science Stacks

- **Algorithms**: Distributed Random Forest (DRF), Generalized Linear Models (GLM), Gradient Boosting Machines (GBM), Stacked Ensembles, XGBoost, Deep Learning (DL)
- **Data Analysis**: Spark SQL, R, Inferential Statistics, Decision Tree analysis, Classification
- **Data Cleaning**: Spark SQL, R
- **Feature Engineering**: Databricks, R, H2O
- **Machine Learning Explainers:** DALEX, LIME
- **Model Building**: Rapid Miner, R, H2O
- **Persistence**: AWS S3, DBFS, MySQL, Postgres, Splunk, Azure BLOBs

Contact

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