

CAREER OVERVIEW

Strong self-starter engineer with proven innovative thought leadership and experience managing others with an interest in data science and automation. Track record of delivering optimal results and being nominated for awards by both peers and customers.

PROFICIENCIES

- *Automation*: Apache Airflow, Ansible, Docker, AWServices via Python's boto3;
- *Data Processing/ETL*: Apache Spark, Pig, Hive, Teradata, Postgres, Kusto/SQL;
- *Languages/Tools*: Adept: C#, Python; Proficient: Scala/Java, Elasticsearch Stack w/X-Pack;
- *Ecosystems/Paradigms*: Azure, AWS, Hadoop; Travis CI, Circle CI, Appveyor, Azure Devops;
- Top Secret Clearance

EXPERIENCE

OCT 2018-PRESENT **Microsoft**

Senior Software Engineer

- Developed the initial backend build pipeline as well as C# solution for the backend of an Azure IoT architecture for Dynamics 365 Connected Store including the Azure Databricks (Apache Spark) data pipeline. The build pipeline automated deployment, configuration, and integration testing of the resources within the ARM template in Azure DevOps. Prior to this there was no CI/CD or backend integration testing. Also I am the designated lead compliance and security adherence for the team.
- Sole data engineer responsible for telemetry for [Dynamics 365 Product Visualize](#) (available in the iOS App Store). This app allows a person to visualize a 3D virtual asset in the context of reality. I ensured the product's data was GDPR compliant and also ran educational sessions on how to use KUSTO and PowerBI so that developers and Project Managers could be empowered to glean information from the data as well.
- In charge of managing the data pipelines (Xflow, Kusto, Cosmos, and PowerBI) for Microsoft's Augmented Reality Dynamics 365 Import Tool which backed [Dynamic 365 Layout](#), which sees over 1000 monthly active users. Dramatically shifted the way that data is viewed and interpreted by enabling a longer historical view, and focused looking at asset conversion from a more customer focused perspective on the business level to drive actionable impact to resolutions of customer issues. Visualized many facets of the asset conversion process via a custom PowerBI dashboard and drive weekly meetings to force actions to create, prioritize, and resolve bugs.

2015-2018

Capital One

Senior Data Engineer

- Part of a team that earned the *The Mark of Distinction Award* and *The Circle of Excellence Award* for building an end-to-end (datapull, create model ready data, create model, score model, create governance documents, etc.) modeling pipeline for Financial Services' most business critical model that is fully compliant to various financial governing bodies restrictions which enabled refits to be automatic quarterly instead of bi-yearly. This effort saves the company over \$1 million dollars in DS salary alone per deployment.
- Created *dockerized Elasticsearch (ELK) stack* for providing customizable dashboards for business partners to gain insights based on agent call notes in an effort to mitigate any detractors who may escalate complaints. Earned *multiple recognition (SPOT) Awards* for my personal contributions toward helping the Data Science organization.
- Winner of the *2017 Chairman and President's Club Award* given to top <1% within Capital One Financial Services. This is the highest attainable award within Capital One Financial Services, and was given for my work in the education of Data Scientists with respect to Data Engineering principles (*AWS, CI/CD, unit testing, basic OO principles, etc.*) and for bringing automation in the form of workflow orchestration using Apache Airflow to their modeling approach of a *Scala Spark + H2O workflow*. This effort helped solidify Airflow as the de facto DS workflow solution in FS.

2014-2015

AT&T

Sr. Specialist Big Data Engineer

- Saved over \$10 million by enabling prescriptive maintenance of vehicles using vehicle telematics, driver behavior data, weather data to examine meteorological, behavioral, and regional effects on vehicle wear this work has a *pending patent*.
- Provided all the telematic driver metrics data used for internal incentivizing app for technicians to drive safely. This program was wholly responsible for incentivizing good driving behavior of the various AT&T technicians and seeing an impact of over 10% decrease in at-fault accidents.

2013-2014

Raytheon IIS

Algorithms/Software Engineer

- Developed an NLP workflow (stopword removal, stemming, synset generation, etc.) for threat detection in order to analyze the effects cognitive biases have when detecting threats. These efforts were part of the motivation for a segment in the 2014 BBC documentary on cognitive biases, *How You Really Make Decisions*, of which my manager was filmed. Our work was nominated to be presented at the internal Raytheon Symposium.

EDUCATION

2019-

M.S. in Computer Science
University Of Washington

2013

B.S. in Electrical Engineering
University Of North Texas