# TRACY SHEN

### **Data Scientist & PhD Candidate in Information Technologies**

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# **WORK EXPERIENCE**

## Data Scientist II

#### **AccuWeather**

July 2018 - Ongoing

State College, PA

- Lead-built ad conversion machine learning models using XGboost,GBM,Random Forest,Elastic Net algorithms as well as TensorFlow model in Python to uncover weather related insights
- Built regression models utilizing national sales data, economic data and weather data to predict quarterly national sales in R
- Data engineering in Power BI by connecting to different API endpoints and queried multiple types of data utilizing MS SQL Management studio from Azure database and Google BigQuery from Google Cloud Platform
- Interacted constantly with internal product owners and external partners to analyze data problems and figured out solutions in agile style

## Business Intelligence Analyst

#### **AccuWeather**

State College, PA

- Lead-built an advanced statistical marketing attribution model to measure AccuWeather Network viewer's impact on app users with significant results in R
- Uncovered insights from web analytic data by building models in R and visualizing in Tableau, Power BI
- Designed interactive dashboards in Power BI to present data trends and anomaly utilizing APIs such as GA, appfigures and Facebook API, etc.

# Research Associate GFK North America

**2013 - 2014** 

New York, NY

- Set up studies, implemented tags, monitored online survey data collection and troubleshot technical issues and anomalies to ensure KPI measurement
- Took the lead to draft up SOP and troubleshooting documents to enhance quality control and data accuracy
- Consolidated and translated data into stories to support Senior Analyst to make presentations in front of clients

## **RESEARCH INTEREST**

- Computational Social Science, Social Media Security
- Machine Learning, Network Analysis, Natural Language Processing

## **RESEARCH PROJECT**

- SysFake-Fake News User Susceptibility Detection, advised by Prof. Dongwon Lee
- Developing machine learning multi-classifiers to predict a user's susceptibility level on social media platforms
- managing 4 TB Geotagged twitter database served on Pittsburgh Super Computer Center and providing twitter analysis for academic grant proposal leveraging data processing power of Hadoop and Spark.

## LIFE PHILOSOPHY

"Relentless commitment can get you wherever you want to go"

## MOST PROUD OF

4

### Courage I had

to work and study PhD at the same time while having a little one



### **Determination & Persistence**

I showed in learning to program after age 30 and with no background



### **Challenges Conquered**

2 triathlons and 1 half marathon in one year

## STRENGTHS

Eye for Detail Motivator & Leader

Excellent Time Management Python

R Tableau PoweBI ArcGIS

SQL NLP Network Analysis

Machine Learning Google BigQuery

## **LANGUAGES**

English Chinese French



## **EDUCATION**

PhD Candidate in Information Sciences and Technology-Machine Learning

#### **Penn State University**

## Aug 2018 - May 2023

# M.A. in International Affairs Penn State University

## Aug 2010 - May 2012

# B.A. in English Zhejiang University

## Sep 2004 - Jun 2008