

## Big Data at AT&T Regional Fall Case Competition

Big Data at AT&T is hosting its first ever Regional Case Competition this fall! This regional competition is open to all students from the following universities: University of Texas at Dallas, University of Texas at Austin, Texas A&M University and Southern Methodist University. Students of all disciplines and levels are eligible to participate. Teams of up to four participants are acceptable for this competition.

This competition encompasses a real-world data science problem specifically focusing on social media and how it affects AT&T. This competition is exploratory in nature and will give students an opportunity to showcase their skills as they pertain to data science. This competition will have two parts. The schedule for University of Texas at Dallas, University of Texas, and Texas A&M University is listed below.

October 14<sup>th</sup>- Case Competition posted on github (@ATT-big-data-becca)

October 20th- Competition write-ups due by 11:59pm

**October 21**<sup>st</sup>- Big Data at AT&T representatives and faculty from each university will review submissions. The top two teams will be selected to continue into part 2.

**November 3<sup>rd</sup>-** If your team is selected, part 2 presentations and write-ups are due by 11:59pm.

**November 4**<sup>th</sup>- Final teams invited to the Plano Foundry Office for part 2 presentations

So why should you participate? Not only will you get exposure to employees and hiring managers within Big Data but there are prizes for the top 2 teams! The winning team will be awarded prizes which add to a total of \$1,000 and the runner up will receive prizes totaling \$500. All teams invited to the Plano Foundry will have the opportunity to network with employees and receive an AT&T goodie bag.



## Introduction

AT&T is one of the largest integrated wireless, broadband, video, telecommunications and strategic service providers in the world. AT&T is committed to providing a world class, effortless customer experience. As the recipient of J.D. Power's top overall ranking in the category of Full-Service Wireless Purchase Experience, AT&T prides itself on its ability to recognize and address customer concerns.

In a global marketplace, where constant innovation and customer contact is vital, AT&T must navigate the landscape of traditional call centers, retail store interactions, and now, social media communication. Every day, 500 million tweets are posted in the Twitter universe. These tweets range from interactions between friends to consumer complaints. As a data-driven company, whose mission is to "connect people with their world, everywhere they live, work and play ... and do it better than anyone else", AT&T can utilize information across the many social media platforms to better serve customers.

## **Problem Statement- Part 1**

Big Data at AT&T is interested in seeing the correlation between social media and retail store performance. One way to do this is to analyze social media content and geo-location of customers to see positive or negative responses about customer satisfaction or product experience. Students are tasked with researching customer sentiment in the Dallas area by utilizing social media platforms like Yelp, Google Reviews, Twitter, etc. For the first round, Big Data at AT&T would like the students to do preliminary research solely based on customer sentiment found on social media. Big Data at AT&T wants to understand how AT&T's products and services are viewed in the community and see if it is reflective of store performance. Students should think outside of the box and include other social media platforms or information not specifically listed here. The end goal of this case study is to be able to rate retail zones—by zip codes, based on its ability to illicit positive response from its customer care.



## FRAMEWORK FOR FIRST ROUND:

- Create a plan on how to collect social media data concerning customer experiences (AT&T will not provide any data for this competition)
- Identify key factors that go into positive or negative customer experiences from the data you collected- list the different social media platforms involved in analysis
- Explain retail zone ratings based off of social media data
- Present the procedure you would take to drill down to specific retail store customer sentiment and how you would rank the locations based on your findings
- Extra Deliverable: Dive deeper into the data and utilize data analytic techniques to go along with your procedure. This is not required but welcomed if you have time.