



Big Data at AT&T

## 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 is listed below.

**October 14<sup>th</sup>**- Case Competition posted online

**October 20<sup>th</sup>**- Competition write-ups due by 11:59pm

**October 21<sup>th</sup>**- Big Data at AT&T representatives and faculty from each university will review submissions and invite the top 2 teams from their respective universities to participate in part 2 of the competition

**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 our prizes are amazing! The winning team will be awarded smartwatches for each team member and the runner up will receive Bluetooth wireless speakers. All teams invited to the Plano Foundry will have the opportunity to network employees and receive an AT&T goodie bag.



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## 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.

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## 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. Teams 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 Teams 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. Participants 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
- 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.

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## TERMS

- In order to be eligible, each Participant on a Team must agree in writing to the Terms below **before** any Deliverables are submitted by or on behalf of the Team or its member-Participants.
- All **Deliverables** (meaning all products of Team and Participant activities undertaken for purposes of participating in this competition including write-ups, submissions, presentations, models, algorithms, procedures, analysis, data, insights, software, content, developments and inventions) and all **Rights in Deliverables** (including U.S. and international trademarks, patents, copyrights, confidential information, trade secrets, and other intellectual property contained in or derived from the Deliverables) shall be owned by AT&T.
- All Deliverables shall be considered “work made for hire” by the Participants for AT&T regardless of whether the Deliverables were created solely by one Participant or jointly two or more Participants. To the extent the Deliverables do not qualify as a “work made for hire”, or where AT&T deems necessary for any other reason, each Participant assigns to AT&T all such right, title, and interest in such Deliverables.
- Each Participant must provide all reasonable assistance, including providing technical information relating to the Deliverables and executing all documents of assignment and other documents that



AT&T may deem necessary or desirable to perfect its ownership interests in such Deliverables and in the Rights in such Deliverables.

- Participants and Teams shall place a notice on each Deliverable, identifying it as "AT&T Proprietary Information."
- Each person who participates in the creation of a Deliverable submitted in this competition agrees to and is bound by these terms as a Participant by virtue of such participation regardless of whether such person has agreed in writing to these Terms.

*S. Shatt*  
*PENG SUN*

*Yuemeng Li*  
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Signature

*10/20/2016*  
\_\_\_\_\_  
Date

*SRIKRISHNA BHATTACHARYA*  
*PENG SUN*  
*YUEMENG LI*  
\_\_\_\_\_  
Printed Name

*UT Dallas*  
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School