# My Statistics 3494W Proposal

#### Michael Marcaccio

#### October 4 2022

### Introduction

Call centers are a staple of the finanical industry with agents working in the United States, Europe, Asia and Africa (Ibrahim et al., 2016). Effective management is essential to running call centers and businesses are consistently trying to model and optimize when customers are calling with questions. Evensen, Frei, and Harker (1999) describes the recent growth of call centers as being, "viewed as little more than lower cost channels for customer problem resolution, are quickly becoming a powerful means of service delivery with a potential for substantial revenue generation". I have chosen this to be my topic of study as I have a strong interest in working in the finanical industry after graduation and I have an unique opportunity to utilize real-world data from an undisclosed finanical firm. Due to this, My findings may provide insight that would benefit the company and its members.

# Specific Aims

I will be attempting to model call volume per a 15 minute interval and determining if there is any seasonality in the calls.

## References

Evensen, A., F. X. Frei, and P. T. Harker (1999). Effective call center management: evidence from financial services. Citeseer.

Ibrahim, R., H. Ye, P. L'Ecuyer, and H. Shen (2016). Modeling and forecasting call center arrivals: A literature survey and a case study. *International Journal of Forecasting* 32(3), 865–874.