



## **Sparkstone Trading Challenge Terms and Conditions: Fall 2016**

### **FOREWORD**

Thank you for your interest in the Sparkstone Trading Challenge! Please refer to the following terms and conditions for more information about the competition and how it can benefit you. From this point forward, also note that all third-party users entering into this agreement will be referred to as the “Registrant” or “Registrants.”

### **I. LOGISTICS**

#### **1.1 Who is organizing the competition?**

The competition is being organized by [Sparkstone Analytics](#): a team of students located on Cornell’s campus that creates and invests in innovative and sustainable trading algorithms to generate high risk-adjusted returns on equity markets.

#### **1.2 Who is sponsoring the competition?**

The lead sponsor of the competition is [Optiver](#): a global electronic market maker with a trading presence in all of the world’s major financial markets. Additionally, the competition is being sponsored by [Susquehanna International Group](#): leaders and innovators in the quantitative trading space.

#### **1.3 Who is eligible to participate in the competition?**

The competition is open to any Cornell student, including undergraduate and graduate level students. Please note that a Registrant must be registered online to compete prior to the registration deadline.

#### **1.4 What is the schedule for the competition?**

Registration will remain open until September 9, 2016 at 11:59:59 PM. The competition will begin on September 12, 2016 at 12:00:00 PM and run until September 30, 2016 at 11:59:59 PM.

### **II. COMPETITION BENEFITS**

#### **2.1 How will this competition benefit my career?**

The competition is being sponsored by Sparkstone Analytics, Optiver, and Susquehanna International Group, so putting the competition on a resume will help Registrants demonstrate strengths in finance and data analytics to future employers. Additionally, Optiver will offer a private dinner for the winning team(s)'s Registrants to allow them to network with and learn from Optiver employees. This year, the winners will be guaranteed an interview with Sparkstone to talk about joining the team.

## **2.2 Is there a monetary prize associated with the competition?**

Yes. The winning team's Registrants will receive \$250, the second place team will receive \$100, and the third place team will receive \$50. The prize money will be split evenly among all participating Registrants within a given team.

## **2.3 What will I learn from this competition?**

Participating in the competition will provide Registrants with deeper insights into the field of algorithmic trading. Registrants will have access to lectures and office hours delivered by corporate sponsors, team members and PhD student affiliates from Sparkstone Analytics. More importantly, however, Registrants will gain firsthand experience in the world of algorithmic trading, and learn what it takes to craft a successful strategy.

# **III. REGISTRATION**

## **3.1 When is the registration deadline?**

The registration deadline is Friday, September 9, 2016 at 11:59:59 PM. Please note that registration will be interpreted as consent to the conditions outlined in this document. Additionally, providing incorrect registration information can result in competition disqualification.

## **3.2 How do I register a team?**

Teams can be registered by filling out the registration form and then connecting with a team member by listing their NetID on the registration form (if applicable). Please note that each team is not allowed to have more than two Registrants.

## **3.3 What if I don't have a team or want to register as an individual?**

Not a problem - list your strengths and Sparkstone will pair you with another Registrant who can complement your skills as a Registrant. Alternatively, Registrants can compete individually.

## **IV. SOFTWARE AND TECHNOLOGY**

### **4.1 What systems will be used to host the competition?**

Sparkstone Analytics has developed a proprietary analytics and execution platform that will be used to host the competition. This system will allow Registrants to rapidly backtest trading algorithms to determine their effectiveness, and can simultaneously perform analytics and execution of an algorithm.

### **4.2 How will strategies be evaluated?**

Strategies will be conducted on a given list of stocks and ETFs that will be available to the Registrant. A set timeline for backtesting data will be given as a sample for testing and construction of strategies. Out of sample data will be used to evaluate the overall performance of the Registrant's trading strategy.

There will be three separate evaluations across which there is a maximum drawdown limit of 25% on the portfolio's starting value. The sharpe ratio averaged across the three samples will be taken as the final sharpe ratio used to compare performance among teams. This annual sharpe ratio will be manually adjusted based on the number of transactions per year assuming a \$100,000 value portfolio. This is to account for transaction cost performance adjustments.

The same strategy will operate on each of the three samples used for testing. Note that strategies will naturally make multiple selections for trading opportunities noticed.

## **V. LIABILITY**

### **5.1 What risks and liabilities should Registrants be aware of entering the competition?**

To the maximum extent allowed by the law, registration in the competition represents the Registrant's consent to release and hold innocent Sparkstone Analytics, its members, its affiliates, or its sponsors from any liability, losses, injuries, demands, damages, actions and/or causes of actions that are directly or indirectly related to or caused by the competition.

Additionally, the Registrant may not hold Sparkstone Analytics, its members, its affiliates, or its sponsors for the misuse of the prize money in circumstances including, but not limited to, property loss, damage, personal injury or death, violation of rights of publicity or privacy, or defamation or incorrect portrayal.

The Registrant also agrees that Sparkstone Analytics, its members, its affiliates, and its sponsors shall have no liability for a Registrant's inability to access the competition website, backtesting platform, software, or any technology therein, even if caused by the negligence of the aforementioned parties.

The Registrant must note that the system used for the competition is unique to Sparkstone Analytics, and any attempts made to recreate the system are explicitly prohibited. Accordingly, by registering for the competition, the Registrant agrees to make no attempts to recreate any of the technologies used for the competition by Sparkstone Analytics. Sparkstone Analytics reserves the right to execute and file all strategies created by the Registrant at any time. The Registrant will also be held accountable for any damage done to the property of Sparkstone Analytics, its members, its affiliates, and its sponsors. Please note that this includes both physical and intellectual property, including, but not limited to, the Sparkstone Analytics backtesting system.

The Registrant consents that any and all disputes, claims, and causes of action that emerge directly or indirectly as a result of the competition, or any prize awarded, will be discussed individually without any form of class action.