# Georgia Institute of Technology



#### Dr. Tucker Balch Associate Professor School of Interactive Computing

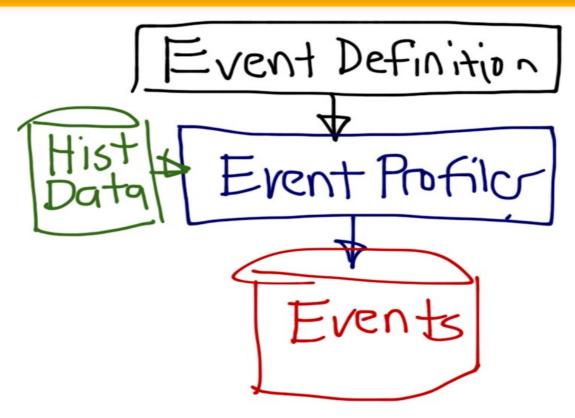
# Computational Investing, Part I

161: How to Assess Event Study

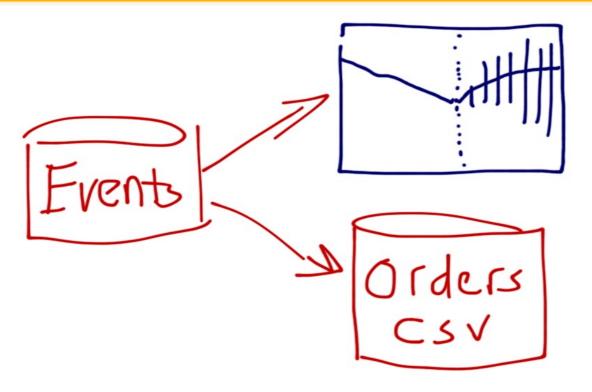
Find out how modern electronic markets work, why stock prices change in the ways they do, and how computation can help our understanding of them. Learn to build algorithms and visualizations to inform investing practice.

**School of Interactive Computing** 

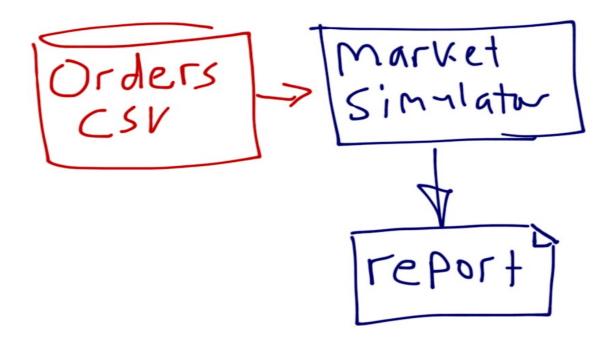




# Georgia Interactive Tech Computing



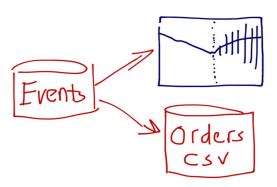
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#### How to Use these tools together

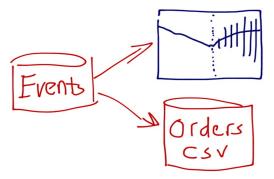
- Event study allows you to test hypotheses:
  - What if market Bollinger value is high, but
  - Stock Bollinger value is low?
  - Buy signal?





### **Simulator Lets You Operationalize**

- Transition from hypothesis to strategy:
  - Buy/Sell?
  - How long to hold?
  - How much to allocate to each bet?



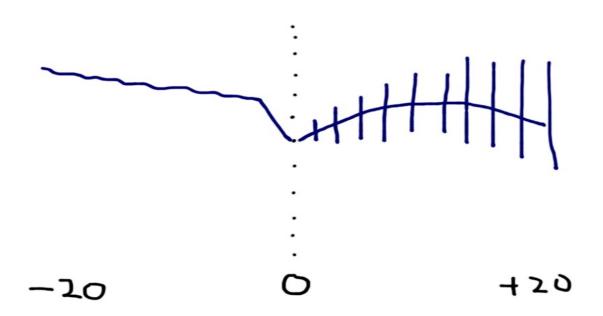


#### **How to Read an Event Study**

- Event study allows you to test hypotheses:
  - What if market Bollinger value is high, but
  - Stock Bollinger value is low?
  - Buy signal?

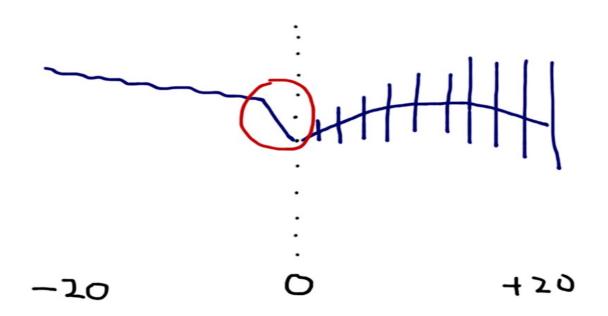


# First, Sanity Check



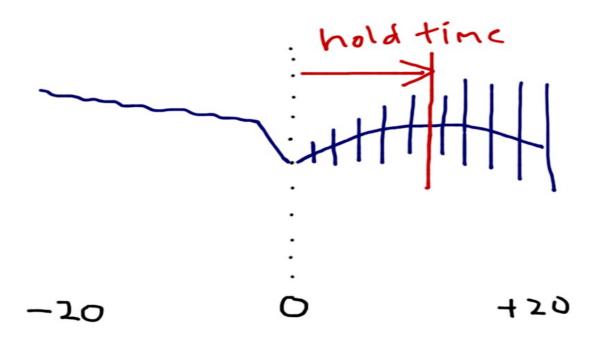


# First, Sanity Check



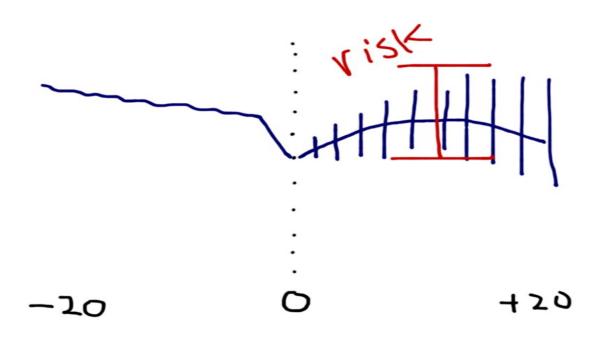


#### Second, Assess: Buy or Sell? Hold Time?



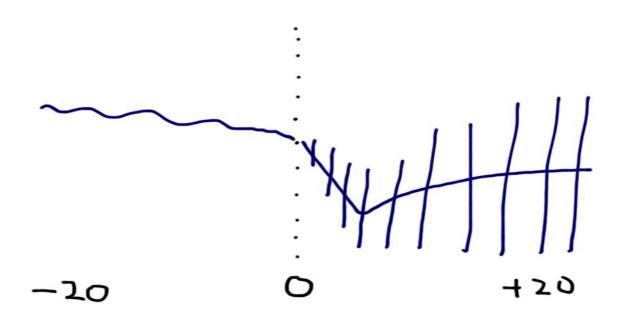


### **Risk? How many opportunities?**





## **Another Example: An Event to "Short"**





#### **Next: Homework 4**