



Dr. Tucker Balch
Associate Professor
School of Interactive
Computing

Computational Investing, Part I

032: Mechanics of the Market

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.

The Order Book (recap)

○ Ask	\$100.10	100
○ Ask	\$100.05	500
○ Ask	\$100.00	1000
○ Bid	\$99.95	100
○ Bid	\$99.90	50
○ Bid	\$99.85	50

How Brokers Connected to Exchanges

Types of Orders (with your Broker)

- ⦿ Additional possibilities:
 - Sell short (to open)
 - Buy (to close)
- ⦿ More complex orders (stop limit)

Mechanics of Short Selling

- ⦿ Borrow the shares
- ⦿ Sell them
- ⦿ You now have:
 - Asset: Cash
 - Liability: Shares owed

Short Selling Example