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The Gamestop Case: How a reddit group shocked the stock market

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ACADEMIC YEAR 2019/2020

# **Table of Contents**

#### **INTRODUCTION** 4

1.	<b>CHAPTER 1:</b> How is it even possible	5
	1.1 Short Selling	
	1.1.1 Short Squeeze	
	1.1.2 Naked Short	
	1.2 r/wallstreetbets	
	1.3 Hedge Fund	
	1.4 Retail Investing	
	1.5 Robinhood	

- **2. CHAPTER 2:** What happened. 15
  - 2.1 GameStop
  - **2.2** Before 25/01/2021
  - **2.3** After 25/01/2021
  - **2.4** The Bubble Burst
  - **2.5** Consequences
    - 2.5.1 For GameStop

# 2.5.2 For Short Sellers

# 2.5.3 For Retail Investors

CONCLUSION 22

REFERENCES 23

## INTRODUCTION

#### How a reddit group shocked the stock market

In January 2021 the price of GameStop's stock skyrocketed, going up from \$17 to more than \$500, more or less 30 times of the valuation at the beginning of the year. Short sellers, represented mostly by Hedge fund, have suffered an estimated loss of \$19 billion [1]. That price increase has almost nothing to do whit GameStop managerial choice, as a matter of fact GME is a dying company, it happened because there was a short squeeze.

That is not been the first short squeeze (Volkswagen in 2008, where their share price went up to more than\$1000 [2], KaloBios in 2015, which share price grew by 10,000% in a week [3]) but as a matter of facts this is the first one organized by a group of retailer investor, that coordinated themselves on a reddit group called r/wallstreetbets.

This short squeeze was possible because of GameStop shares that were heavily shorted, indeed almost 140% of GME public float had been sold short, and retail investor started pumping up the price buying GME stock. GameStop was not the only stock pumped, also BlackBerry, AMC, Nokia and metal futures increased, but not as GME.

We have decided to divide this thesis in two section.

The first section is focused on giving a briefly explain of all financial terms related to this short squeeze as well as a definition of all the side, from hedge fund to retailer investor.

The second section is dedicated to explaining the events, analyzing it from the beginning to the end, giving also some possible consequence for all the side.

4

#### 1 CHAPTER 1: HOW IS IT EVEN POSSIBLE?

#### 1.1 SHORT SELLING

Short selling, also called shorting, is a financial transaction that profits from a fall in the price of a stock or in any other security.

To open a selling position, an investor has to borrow any kind of asset that he thinks will fall in price by a set premeditated date, paying a previously agreed fee. The trader then proceeded to sell the borrowed assets at the market price aiming to buy it back at a smaller price prior to return the share to the original owner.

Investors must also have a margin account. The customer's equity in the account must not fall below 25 percent of the current market value of the securities in the account. Otherwise, the customer may be required to deposit more funds or securities to maintain equity at the 25 percent level (referred to as a margin call). Failure to do so may cause the firm to liquidate the securities in the customer's account in order to bring the account's equity back up to the required level. [4]

The maximum gain from short selling can be 100% of the initial investment, while the loss could be potentially endless because the price of a stock or other asset that has been borrowed could grow to infinity.

# **Costs of Short Selling**

One of the main differences between buying and shorting is that for buying a stock the only cost is the brokers trading commissions, while for short selling there are relevant other cost.

- When selling stocks on margin, margin interest may be a major cost. Since short sales can only be made through margin accounts, interest payable on short trades can be added over time, especially if short positions are left open for an extended period of time.
- 2. Shares that are hard to borrow have "hard-to-borrow" charges that can be very large because of high short interest, small float, or some other excuse. The fee is based on an annualized rate that can vary from a small fraction of a percent to more than 100 percent of the short trade value and is pro-rated for the number of days the short trade is available. The precise dollar amount of the fee

cannot be known in advance, as the hard-to-borrow rate will fluctuate dramatically from day to day and even on an intra-day basis. The fee is typically paid either at the month-end or at the close of the short trade by the broker-dealer to the customer's account, and if it is very high, it may make a major dent in the profitability of a short trade or cause losses on it.

3. The short seller is responsible for making dividend payments on the shorted stock to the entity from whom the stock has been borrowed. The short seller is also on the hook for making payments on account of other events associated with the shorted stock, such as share splits, spin-offs, and bonus share issues, all of which are unpredictable events. [5]

#### 1.1.1 SHORT SQUEZEE

When a lack of supply tends to force prices upward. In particular, when prices of a stock or commodity future contracts start to move up sharply and many traders with short positions are forced to buy stocks or commodities in order to cover their positions and prevent (limit) losses. This sudden surge of buying leads to even higher prices, further aggravating the losses of short sellers who have not covered their positions. [6]

#### 1.1.2 NAKED SHORT

The unlawful practice of short selling shares which have not been affirmatively decided to exist is naked shorting.

Typically, traders have to borrow or assess that a stock can be lent before they sell it for a short time. Naked shorting, therefore, refers to short pressure on a stock that may be greater than the market's tradable shares.

After being made illegal since the financial crisis of 2008-2009, due to loopholes in laws and inconsistencies between paper and electronic trading systems, naked shorting continues to happen.

Such short sales are almost always only performed by market makers of options because they supposedly need to do so in order to retain liquidity in the markets of options.

However, these options market makers are often brokers or large hedge fund who abuse the options market maker exemption. [7]

In a "naked" short sale, the seller does not borrow or arrange to borrow the securities in time to make delivery to the buyer within the standard three-day settlement period. As a result, the seller fails to deliver securities to the buyer when delivery is due; this is known as a "failure to deliver" or "fail." [8]

I have to clarify that there is no evidence of naked shorting in this case as I'm writing right now.

7

#### 1.2 R/WALLSTREETBETS



Transcrete to the Tree

R/wallstreetsbets is a Reddit group founded in 2012 by Jaime Rogozinski. He is born in 1981. With his wife, he lives in Mexico City, and they have two little children. He works as a consultant.

Hardly the kind of character one might associate with the forum of roiling investment. He is not the kind of guy you think could bring some hedge funds to their knees.

He wanted to create a hub on Reddit, a message board operator, where like-minded individuals could meet to exclusively discuss the kind of trades that would crawl the skin of a financial advisor.

Associates of r/wallstreetbets are frequently adolescent retail traders who did not have any financial education disregarding any financial method so their operation are seen more as gambling than reasonably investing

In its first few years, the community counted only a few thousand subscribers, but In the year 2019, everything changed. Trading commissions were removed by brokerage giants Fidelity Investments and Charles Schwab Corp [9].

Interest in retail trade exploded, and the number of subscribers to wallstreetbets quickly exceeded 500,000, then one million during the March 2020 market sell-off and 6.2 million during the now famous campaign to increase GameStop share price. [10]

'A massive group of people have organized where they collectively have a seat at the poker table, which was previously invite-only.'

—Jaime Rogozinski [10]

Wallstreetbets members did not care at all of losing money, they cheer for loss like they cheer for profit, and they hate hedge fund and stock shorter.

They view the GameStop case as a war against hedge fund and brokers rather than an opportunity to gain some profits, as shown by most of the comments.

- <<Buy more during dips if you can, but at least hold. We just have to hold until they fold. Today's actions by several brokers just show how desperate the hedge funds are getting. Hold with your immovable diamond hands for all that you hold dear and we will be breaking Wall Street TOGETHER while making gargantuan tendies in the end!>> [11] from WSB user 'uwillmire', that comment has 135k upvotes.
- << I was in my early teens during the '08 crisis. I vividly remember the enormous repercussions that the reckless actions by those on Wall Street had in my personal life, and the lives of those close to me...To Melvin Capital: you stand for everything that I hated during that time. You're a firm who makes money off of exploiting a company and manipulating markets and media to your advantage. Your continued existence is a sharp reminder that the ones in charge of so much hardship during the '08 crisis were not punished.... I bought shares a few days ago. I dumped my savings into GME, paid my rent for this month with my credit card, and dumped my rent money into more GME (which for the people here at WSB, I would not recommend). And I'm holding. This is personal for me, and millions of others.>> [12] - from WSB user 'ssauronn', Entitled "An Open Letter to Melvin Capital, CNBC, Boomers, and WSB" It has 139k upvotes.
- "If I can hold at -\$10MM then you can hold too. ????" [13] from WSB user 'lanten fan' 137k upvotes.

9

#### 1.3 HEDGE FUNDS

Hedge funds are a type of mutual fund with distinctive features. Hedge funds are structured as limited partnerships ranging from \$100,000 to, more commonly, \$1 million or more in minimum contributions. These limitations mean that hedge funds are subject to regulations that are much weaker than other mutual funds. Hedge funds invest in many types of assets, some specializing in stocks, some in bonds, some in foreign currencies, and still others in assets that are far more exotic. [14]

Hedge funds usually require investors to commit their money for long periods of time, often several years. The purpose of this requirement is to give breathing space for managers to try long-range strategies.

Hedge funds frequently charge investors large fees. A 1 percent annual asset management fee plus 20 percent of profits is charged by the typical fund. Some charge substantially more. Long Term Capital Management, for example, charged a 2 percent management fee to investors and took 25 percent of profits.

The majority of hedge funds are structured as limited partnerships. Federal legislation restricts hedge funds, to no more than 99 restricted partners with stable annual incomes of \$200,000 or more or a net worth of \$1 million. If each has \$5 million in committed money, funds can have up to 499 limited partners. All of these limits are targeted at encouraging relatively unregulated hedge funds to exist, under the premise that the wealthy will look out after themselves. To escape all compliance constraints, many of the 4,000 funds are domiciled offshore.

Despite the argument that the wealthy do not need regulatory protection from the risk incurred by hedge fund investments, the SEC passed regulation in 2006 requiring that hedge fund advisers register. Two issues triggering the new move were cited by the SEC. First, they were worried about the rising occurrence of hedge fund advisors' fraudulent conduct. Second, they raised frustration that by "realization," more investors invested in hedge funds and that this warranted expanded scrutiny. The SEC will perform on-site inspections by forcing advisors to report. Such assessments are important to secure the stock market of the nation as well as hedge fund investors, the SEC argues. [15]

#### 1.4 RETAIL INVESTING

#### What Is a Retail Investor?

A retail investor, also known as an individual investor, is a non-professional investor who buys and sells securities or funds that contain a basket of securities such as mutual funds and exchange traded funds (ETFs). [16]

Through traditional or online brokerage firms or other types of investment accounts, retail investors execute their trades. As compared to institutional investors, retail investors buy securities for their own personal accounts and often trade in dramatically smaller amounts. Alternative investment classes such as private equity and hedge funds can now be accessed by wealthier retail investors, however. Most retail investors may have to pay higher fees or commissions for their trades because of their low purchasing power, although many brokers have eliminated fees for online trades. [16]

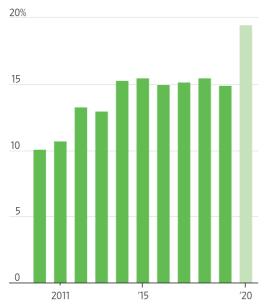
The retail investment market in the United States is significant in size and scope, and according to the SEC, in 2020, "American households own \$29 trillion worth of equities—more than 58% of the U.S. equity market—either directly or indirectly through mutual funds, retirement accounts, and other investments." [17]

"Forty-three million U.S. households hold a retirement or brokerage account. Fifty-six million U.S. households (44% of all households) own at least one U.S. mutual fund" as of 2018. [18]

And while Americans gravitated to savings accounts and passive investing in the aftermath of the 2008 financial crisis, the number of households that own stocks has risen since. According to the Federal Reserve's survey of consumer finances, about 53% of families owned stocks, and 70% of upper-middle-income families owned stocks in 2019. [19]

Unlike institutional traders, retail traders are more likely to invest in stocks of smaller companies because they can have lower price points, allowing them to buy many different securities in an adequate number of shares to achieve a diversified portfolio.

# Individual investors' estimated share of U.S. equities trading volume



Note: 2020 data are for January through June. Source: Bloomberg Intelligence Graph by the Wall Street Journal.

As we can see from that graph, The percentage of individual investor's estimated share is growing really fast, with a huge boost in 2020 due to the covid-19 pandemic and, due to the raising popularity of trading platforms like Robinhood, Etoro and Webull.

Critics say smaller investors do not have the knowledge, discipline, or expertise to research their investments. As a result, they undermine the financial markets' role in allocating resources efficiently, and through crowded trades, cause panic selling. These unsophisticated investors are said to be vulnerable to behavioral biases and may underestimate the power of the masses that drive the market. [20]

#### 1.5 ROBINHOOD

Robinhood is an American online stock brokerage, founded in 2013 by Baiju Bhatt and Vladimir Tenev. They met at the Stanford University, and after graduating they moved to New York where they started two financial companies. Here they noted that that big Wall Street firms were paying next-to-nothing to trade stocks, while the brokers commonly asked commission between \$5 to \$10. They moved to California where they started the first commission-free trading company.

Quoting the two young founders, the main goal of the app was to build a financial product that would enable everyone, not just the wealthy, access to financial markets. [21].

Their formula was revolutionary, first of all it was available only for mobile devices till they launched a web platform in November 2017[22], then they offered an easy-to-use app, free trading and they did not require a minimum balance to open an account. Officially launched in March 2015, the app already had a list of 800,000 people who had already created an account, and their average age was 26. [23]

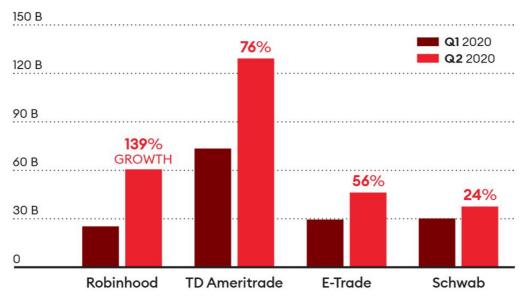
In April 2017 they had 2 millions of users and the valuation of the company was at \$1.3 billion. Just one year later it has grown to \$5.6 billions, doubling their users and passing \$150 billions in transaction volume. [24]

They launched Robinhood Crypto in the early 2018, where people could buy crypto (firstly only Bitcoin and Ethereum, now many more are available) and Robinhood Feed. They also launched a premium subscription, called Robinhood Gold, that paying \$5 a month will let the user borrow more money for margin trading and trade before and after market close. In 2019 the company was valued between \$7 to \$10 billion and they expanded to the UK.

The Covid-19 and the related crash of the stock market did not damage Robinhood, instead the trading volume increased. That's because of government handouts of \$1200 which most people used to invest, mostly on Robinhood (But also other popular online brokerages increased their trading volume).

Quoting Antoine Gara from Forbes: Covid-19 and the flow of government handouts have been manna from heaven for Robinhood. The firm has added more than 3 million accounts since January, a 30% rise, and it expects revenue to hit \$700 million this year, a 250% spike from 2019, according to a person familiar with the private company's finances. [25].

#### Trading Volume at Online Brokerages (Number of Shares)



Graph by Forbes [54]

How the name will suggest, the business model of Robinhood is to give the idea that there is a conflict between retailer investors and institutional investor, and that they are clearly on the side of retailers, well this idea looks more hollow once you analyze Robinhood's way of make revenue. The platform is designed to profit by selling its customers' trading data to institutional investor (*Citadel Securities and a handful of other firms paid Robinhood nearly \$100 million in the first quarter of 2020 alone [26]*).

Robinhood's formula was shortly adopted by a lot of online trading website, such as Etoro or Webull, stating a change in the trading industy.

# 2 CHAPTER 2: WHAT HAPPENED?

#### 2.1 WHY GAMESTOP

# Gamestop®

First of all, let me introduce GameStop, an American video game retailer who utilize the brick-and-mortar strategy. The company was founded in 1984 in Dallas, it was originally called Babbage's but in 1999 it took on its current name.

GameStop is the world's largest video game retailer, it operates 5500 retail stores across Europe, United States, Australia, Canada and New Zealand.

While being seen as one of the most profitable company in the 2000s, it started to decline during the mid-late 2010s due to the shift of video game sales to online key's download and by various failed investment by the company in smartphone retail. The Covid-19 pandemic has not help GameStop, as a matter of fact the company has posted \$470 million in losses in 2019. They close 321 locations permanently in 2019, 462 in 2020 and the company has announced that by the end of fiscal year in March that number will rise to more than 1000. That's why GME's stock price in April 2020 was around \$3, while in November 2013 was around \$50.

GameStop had essentially the perfect requirement to be called a dying company so, the short sellers have seen an opportunity to short, and they did that. More than the 139% of available stocks was shorted.

This may be the first explanation, but in my personal opinion an affection to the GameStop company plays a bigger role.

As a matter of fact, almost all of the users on WallStreetBets are millennials, which have a large attachment to the firm. This attachment has led to a lot of people investing in it just to save their childhood "paradise", also driven by the idea that they know the company in which they are investing so, they know that the price should be much higher.

#### 2.2 BEFORE 25/01/2021

The combination of these two separate effects has leaded to a lot of people investing long on GME stocks. But when did they precisely started?

The price of GameStop's stock was near \$6 in the early 2019 but due to the COVID-19 pandemic it collapsed, going down to less than \$3 in the first week of April. The price recovered during the summer because of the enthusiasm driven by the arrival of new generation of console, actions by investors, and by the economy starting to recover from the pandemic.

GameStop stock started 2021 at \$17.25. But doubled in the mid of January reaching a price of \$39.91.

That has nothing to do with the reddit group, that rise was given by the step up of three new board members, Ryan Cohen (the co-founder of the online pet supply company Chewy) and two others former Chewy executives. They were hired to accelerate the process of becoming a tech-centric e-commerce powerhouse.

The rumor of buying GME stock was in the reddit group since last April but became a reality in the mid of January 2021. When people saw the stock doubling is value in just two week, while the reddit group was claiming all the credit for it, they started being serious on the idea of GME and on the idea that they could get revenge on Wall Street.

All was aligned for the WSB group, where users start claiming the credit for this price double and they start to really make a lot of noise. The group became larger and larger, and a lot of people that have never traded in their life started doing it, keeping GME price going up. Gme closed the week with a new record price of \$65, and a lot of experts said that it will be the highest price and that in the next week the price will return to normal level. They were wrong.

#### 2.3 AFTER 25/01/2021

The market has opened on the 25 of January and the price was still rising, proving wrong to almost all financial advisers that said that said that the bubble should have bust during the weekend. After the market closure the GME stock case became one of the most discussed topics, helped by Elon Musk's tweet, but also by all the media coverage.



So, when the market opened on the 26 of January due to all of the media coverage and by the fact that almost all analyses were wrong, the enthusiasm on GME was at is best.

Also, the Melvin Capital Management founder Gabe Plotkin said that they closed the short position after a huge loss. Melvin Capital Management lost 53% in January, according to people familiar with the firm, it started the year with about \$12.5 billion and now runs more than \$8 billion. The current figure includes \$2.75 billion in emergency funds Citadel LLC, so the expected loss is about \$7 billion. [27]

Maplelane Capital, another hedge fund that has sustained significant losses this month, ended January with a roughly 45% loss, said a person familiar with the fund. It managed about \$3.5 billion at the start of the year.

D1, which ended the month down about 20%, was short AMC and GameStop, said people familiar with the fund. One of the people said D1 had exited both positions by the 27 morning but that those were small drivers of losses. [28]

As we have seen, to close a short position the funds have to buy back the shares, leading the price to skyrocket to almost \$150 on Jan. 26.

But the real short squeeze happened on the 27 of January, when the price went up to \$450, and in the after-market it reached almost \$500 per share.

Most retail brokerages restricted trading on GME, and on the 28 of January Robinhood (one of the most famous online Free-stock trading website) removed the ability to open new long position on GME so, investors would be able to sell only their positions. Almost all retail brokerage followed Robinhood's step in few hours, leading to a drop in price returning to \$193 per share.

Robinhood told clients in a blog post that it would close out some positions automatically if the client was at risk of not having the necessary collateral, and so they did. [29]

Obviously that action has led to heavy critics to brokers. A class action was filed against Robinhood [30], but they have said that the trading restrictions stemmed from mandates from their clearing firm, which process the securities on the back end after a user executes a trade with their brokerage.

Webull Chief Executive Anthony Denier said his platform's clearing firm, Apex Clearing Corp., notified him Thursday morning that Webull needed to shut off the ability to open new positions in certain stocks. Otherwise, Apex wouldn't be able to settle the trades, he said. Apex didn't respond to a request for comment. [31]

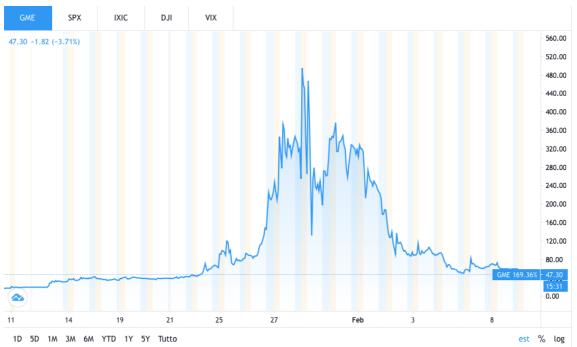
The motivation of online brokers seems legit, but we cannot exclude the possibility of a conflict of interest.

When retail brokerages removed their restrictions the price of GME re-started going up returning to almost \$350, the price that was in force before the regulations.

#### 2.4 THE BUBBLE BURST

The return to \$350 per share didn't last long, indeed on the  $1^{st}$  of February the price starts to fall, when the market opened the price was \$316, but it closed at \$225.

The day after, due to the panic selling of all retailer sellers the price finally drops to \$90. As I'm writing right now the price is fluctuating near \$50 per share, clearing putting an end to this insane short squeeze.



Graph by <a href="https://it.tradingview.com/symbols/NYSE-GME/">https://it.tradingview.com/symbols/NYSE-GME/</a>

#### 2.5 CONSEQUENCES

#### 2.5.1 FOR GAMESTOP

This short squeeze brought a lot of free publicity for GameStop, but beyond that the company will benefit from next to nothing. Surely those who have benefited the most are the managers, that since the start of this month four members of GameStop's board of directors have earned \$20 million from selling company stock [32].

Hastia Capital, an investment fund owned by Kurt Wolf, a board manager of GameStop, sold 2/3 of its stake of GME earning over \$17 million. GameStop later restricted insider and executives from selling more share but, no insider trading laws has been broke because all the events were not related to the executive sell.

#### 2.5.2 FOR SHORT SELLERS

Melvin Capital was one of the short sellers that lost more, with an expected loss of \$7 billion. Also Andrew Left, that as always promoted shot selling, has suffered loss, he claims that he closed the position suffering total loss. Citron Research claimed in a Youtube video that they closed the majority of its short positions in the range of \$90 per share at a loss of 100 percent [33]

They also have stated "Citron Research discontinues short selling research After 20 years of publishing Citron will no longer publish "short reports". We will focus on giving long side multibagger opportunities for individual investors" in a tweet by their official account [34]

#### 2.5.3 FOR RETAIL INVESTORS

There are not consequences for retail investor outside of the loss/profit made during the short squeeze. All the retailer who bought GameStop's share before the peak and sold it at the peak have earned something, while all the investor who have joined later or that did not close the position before the drop have suffered loss.

Except for Keith Gill, one of the most active users in r/wallstreetbets, that will participate in the hearing on Gamestop.

20

There will be a hearing on the GameStop case, that will take place in Washington on Thursday 18. The hearing will be chaired by Maxine Waters and the title will be "Game Stopped? Who Wins and Loses When Short Sellers, Social Media, and Retail Investors Collide" [35].

As I'm writing are settle to testify:

Ken Griffin, CEO of Citadel.

Gabe Plotkin, funder and CIO of Melvin Capital.

Vlad Tenev, CEO and co-founder of Robinhood.

Steve Huffman, co-founder and CEO of Reddit.

Keith Gill, famous trader that emerged as one of the key players in the reddit group wallstreetbets.

## CONCLUSION

Now is clearer than ever that financial markets have evolved, with retail investor that for the first time showed the fact that they can organize, not only on Reddit, and they can move the market as well as huge investment funds.

While previously the small investors were lacking resources and coordination in order to have a real impact on financial markets, in the most recent times, they have proved the ability of disruptive coordinated actions that could seriously compromise the status quo

GameStop as a company will for sure benefit from all this free publicity, and only time will tell if this short squeeze will save the company from failure.

Investment funds will be more cautious when they short, and they will short less. Citron research stated that they will no longer publish short reports.

Moving forward will be interesting seeing how the institutions will respond to this case and if they will establish some regulations. GameStop is the first stock which price is manipulated by an organized huge group of retailers, but for sure will not be the last one. As I am writing now the subreddit is focused on the cannabis industry, with clear result in an increase in price of related stock.

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# **Special Thanks**

To my professor Stefano Di Colli, for his patience, cordiality and competence.

To my family, for the help and support.

To my girlfriend, for always believing in me and pushing me forward.

To my friends, who always cheered me on.

G. L.