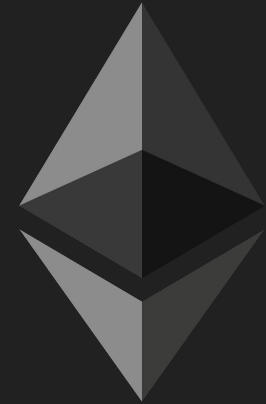
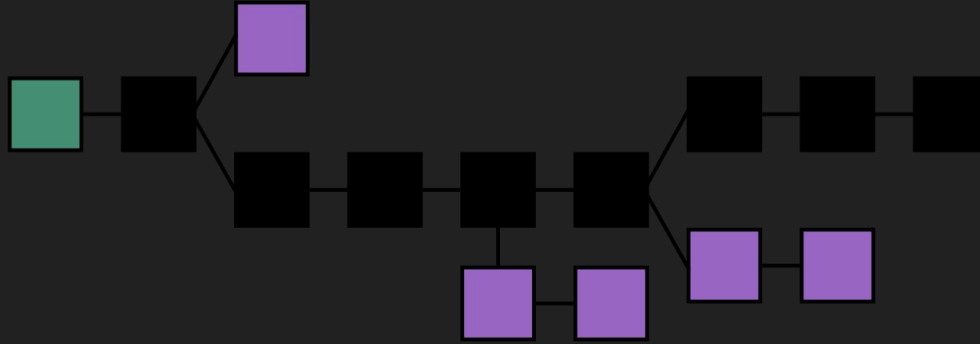


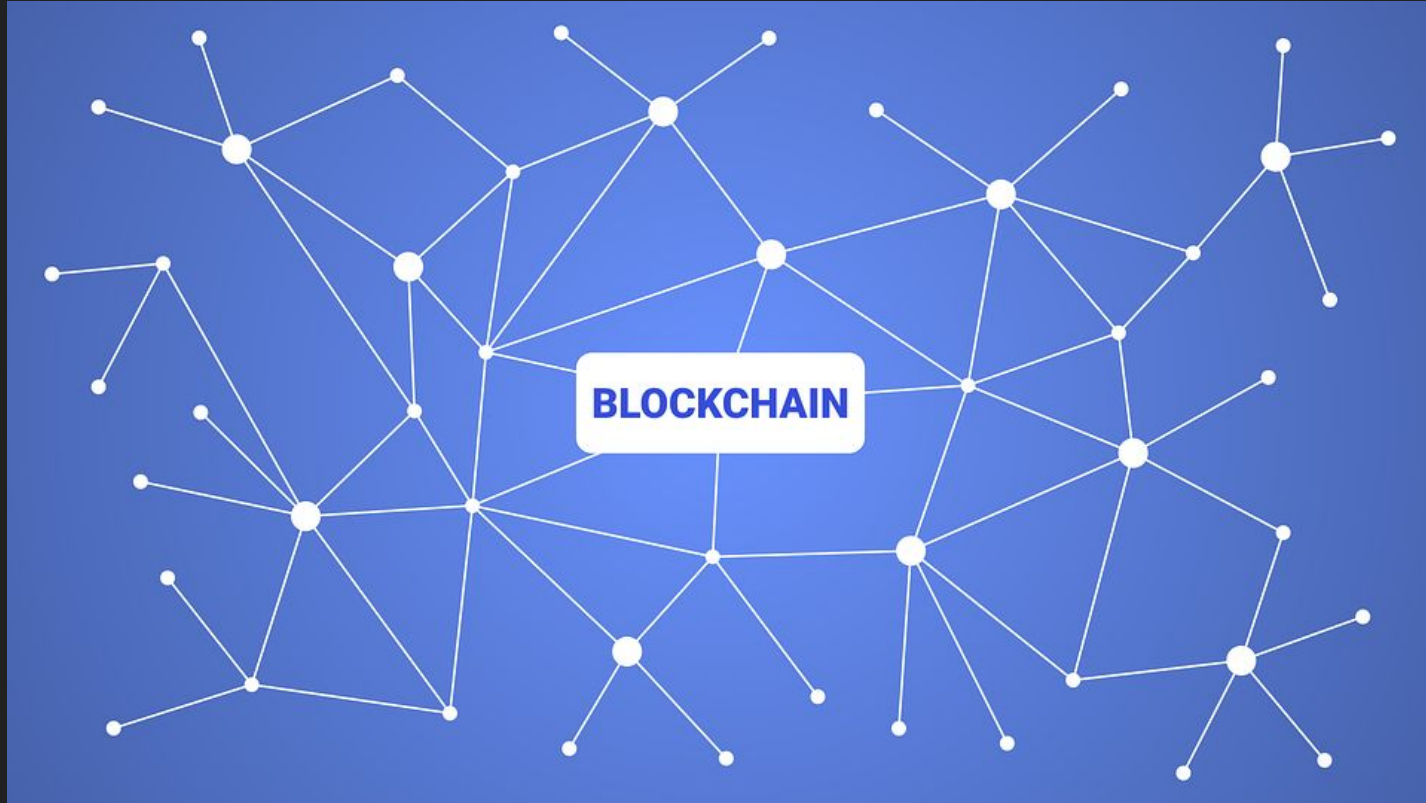
# The Butterfly “Affect”: Impact of Development Practices on Cryptocurrency Prices

Silvia Bartolucci, Giuseppe Destefanis, **Marco Ortu**,  
Nicola Uras

# Blockchain & Cryptocurrency



# Open Source Community



# Open Source Community on Github

The screenshot displays the GitHub interface for the `bitcoin/bitcoin` repository. At the top, navigation links include "Why GitHub?", "Enterprise", "Explore", "Marketplace", and "Pricing". A search bar and "Sign in" / "Sign up" buttons are also present. The repository name "bitcoin / bitcoin" is shown with statistics: 3.5k Watchers, 41k Stars, and 24.5k Forks. The "Issues" tab is selected, showing 748 open issues. Below this, three pinned issues are displayed:

- Release schedule for 0.19.0** (#15940, opened 2 May by `iaanwj`, 9 comments)
- Release process for 0.19.0** (#16996, opened 30 Sep by `iaanwj`, 7 comments)
- v0.19.0 testing** (#17079, opened 29 days ago by `Sjors`, 11 comments)

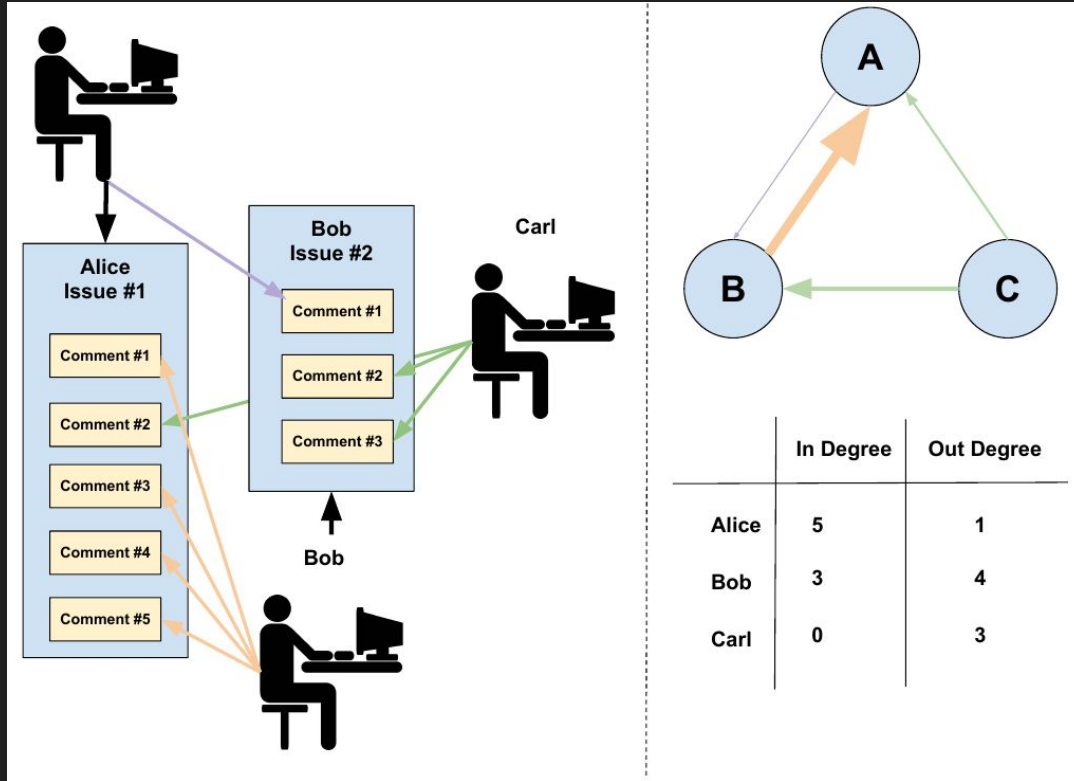
A search bar contains the text "is:issue is:open". Below it, filters for "Labels" (44) and "Milestones" (6) are visible, along with a "New issue" button. The main list of issues shows:

- 748 Open** (4,280 Closed) | Author | Labels | Projects | Milestones | Assignee | Sort
- Add tests checking missing reject reasons for function `IsStandardTx`** (Tests, good first issue) | #17394 opened 1 hour ago by `theStack` | 0 of 7
- Fake data corruption after not really running out of disk space during IBD (pruned, Windows VM on macOS)** (Bug) | #17392 opened 7 hours ago by `Sjors` | 4 comments
- Doc: Consolidate documentation of functional test parameters.** (Docs, Feature) | #17380 opened 23 hours ago by `jachiang`
- Segfault running master on NetBSD** (Linux/Unix) | #17379 opened 23 hours ago by `fanquake` | 3 comments
- Improve Running CI Locally** (Feature, Tests) | #17372 opened 2 days ago by `JeremyRubin`
- Verification progress tests** (RPC/REST/ZMQ, Tests) | #17352 opened 4 days ago by `darosior` | 2 comments

Evaluating the potential of alternative cryptocurrencies. In Handbook of digital currency

Bobby Ong, Teik Ming Lee, Guo Li, and David LEE Kuo Chuen.

# Open Source Community on Github



# Open Source Community on Github



# Sentiment



Sentiment Polarity Detection for Software Development  
Fabio Calefato, Filippo Lanubile, Federico Maiorano, Nicole Novielli

# Politeness

A computational approach to politeness with application to social factors

Cristian Danescu-Niculescu-Mizil, Moritz Sudhof, Dan Jurafsky, Jure Leskovec

You left your car running.  
I turned it off & put the  
keys in the "closed" cupholder.  
Have a nice day  
☺



# Emotions

An exploratory qualitative and quantitative analysis of emotions in issue report comments of open source systems

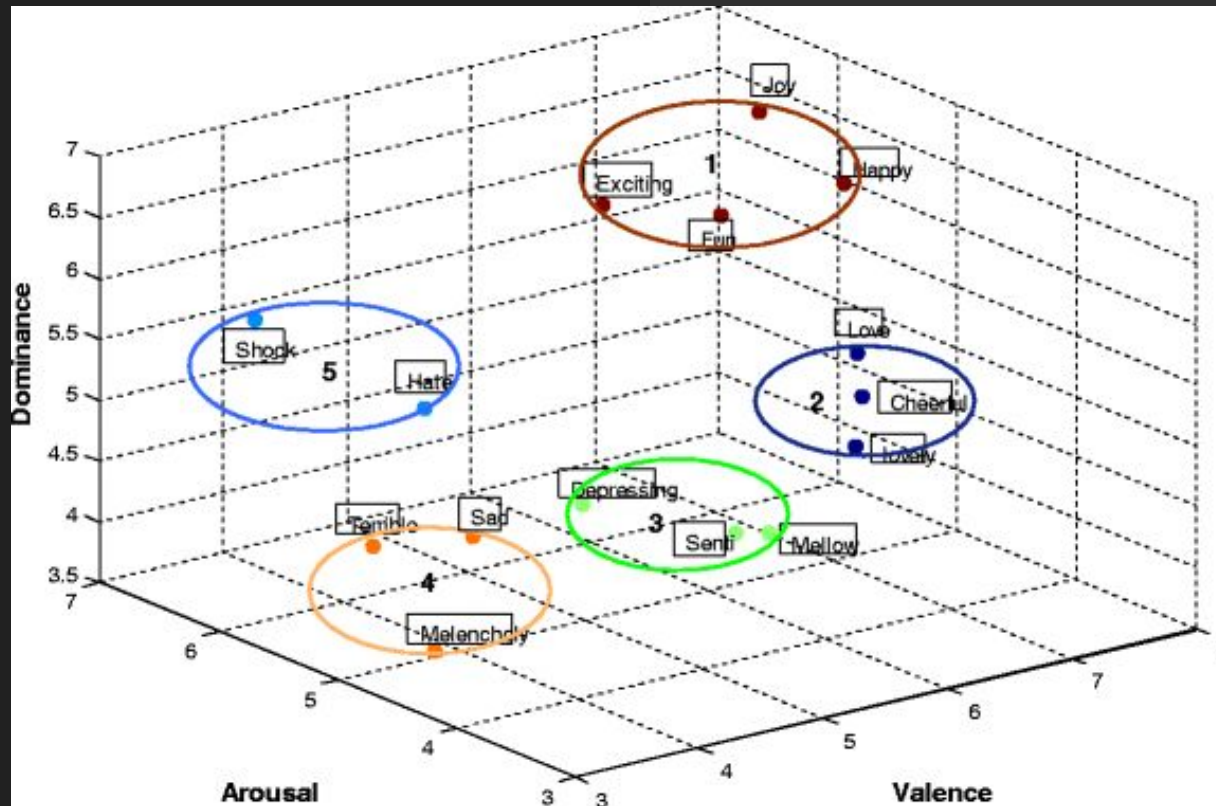
A Murgia, M Ortu, P Tourani, B Adams, S Demeyer



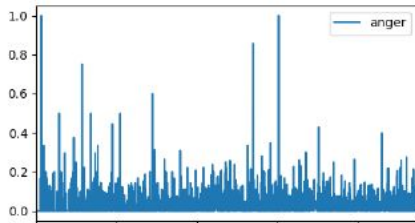
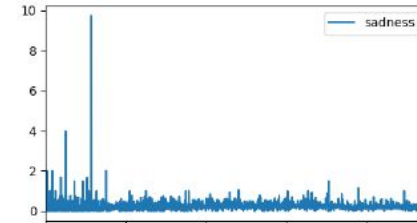
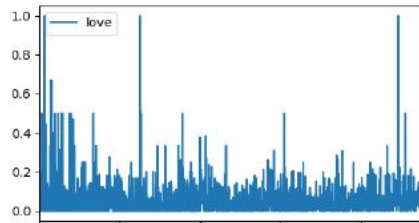
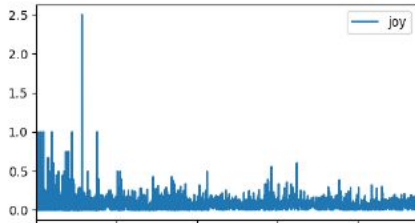
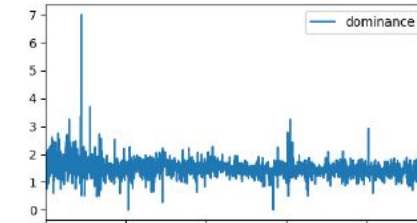
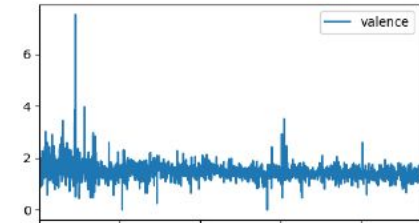
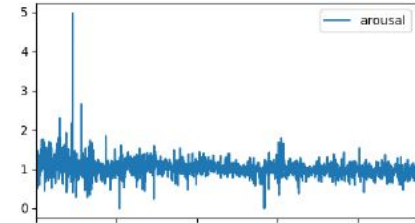
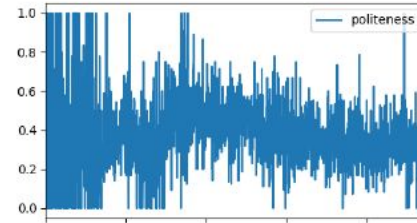
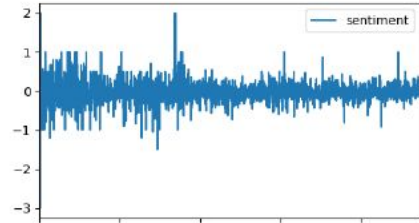
# Emotions: VAD

Norms of valence, arousal, and dominance for 13,915 English lemmas.

Amy Beth Warriner, Victor Kuperman, and Marc Brysbaert.



# Affect Metrics

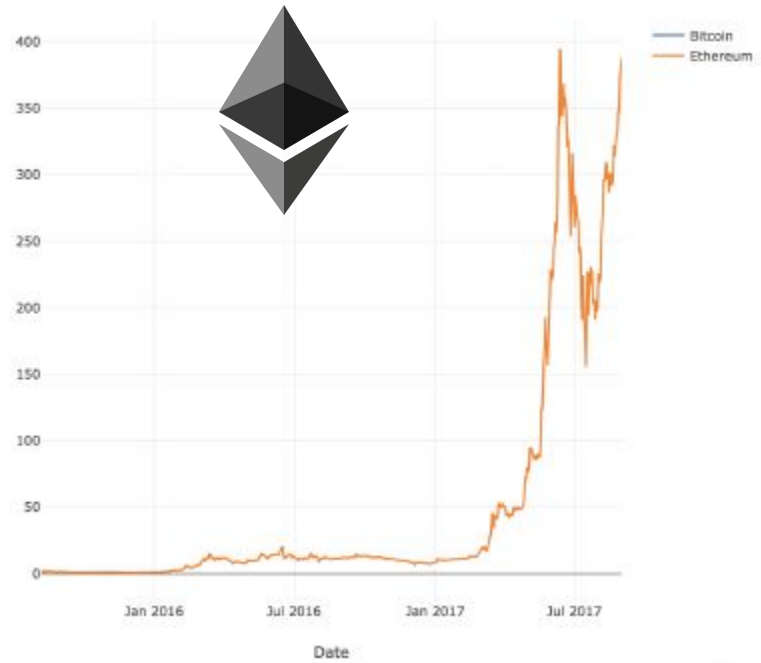
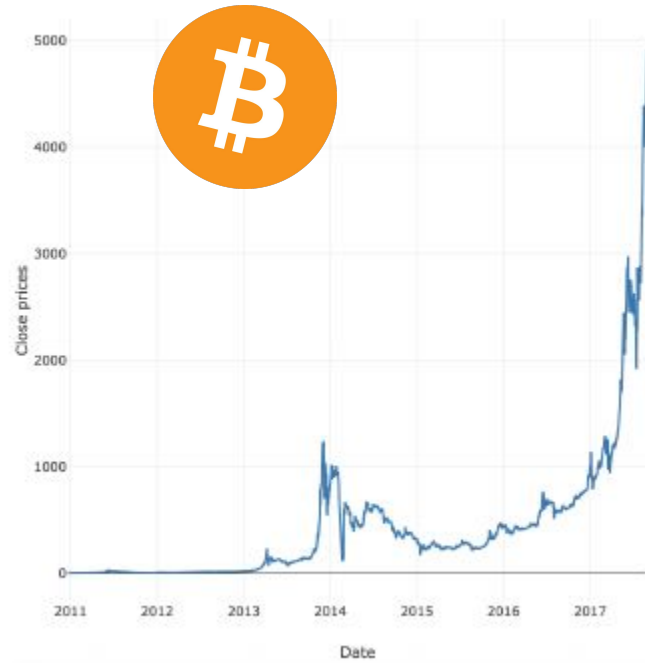


2010-12-20 2012-07-04 2013-11-24 2015-04-09 2016-08-22  
Date

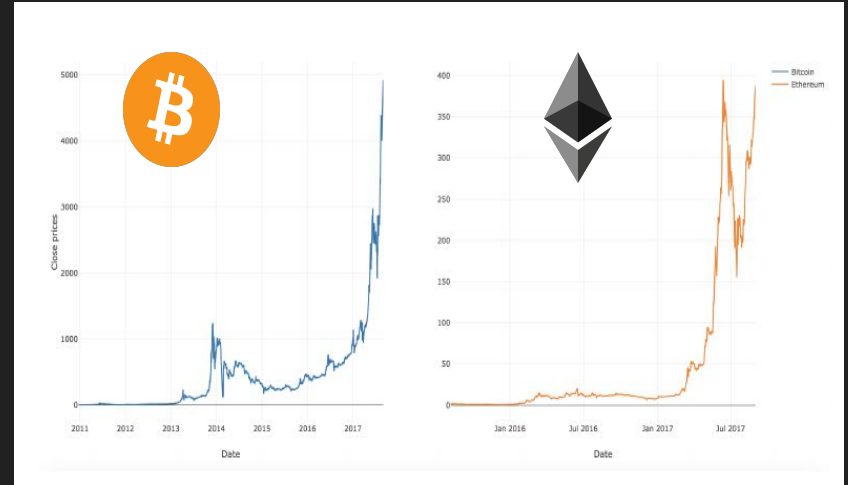
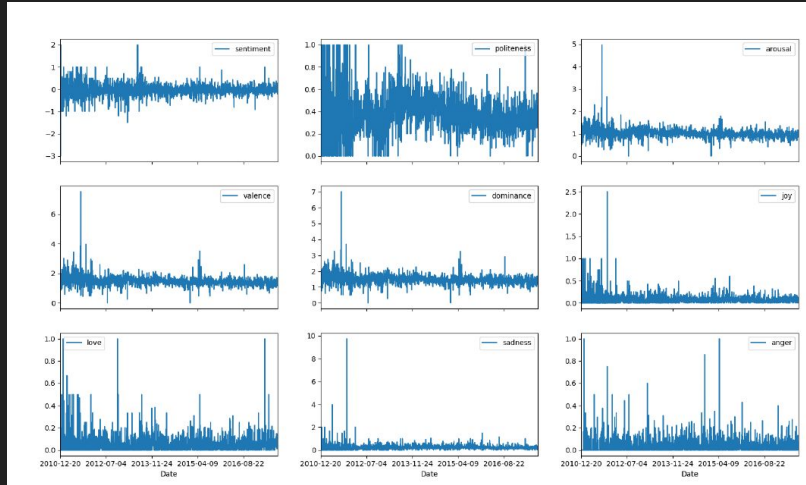
2010-12-20 2012-07-04 2013-11-24 2015-04-09 2016-08-22  
Date

2010-12-20 2012-07-04 2013-11-24 2015-04-09 2016-08-22  
Date

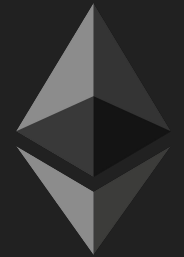
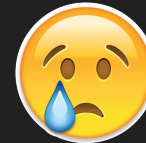
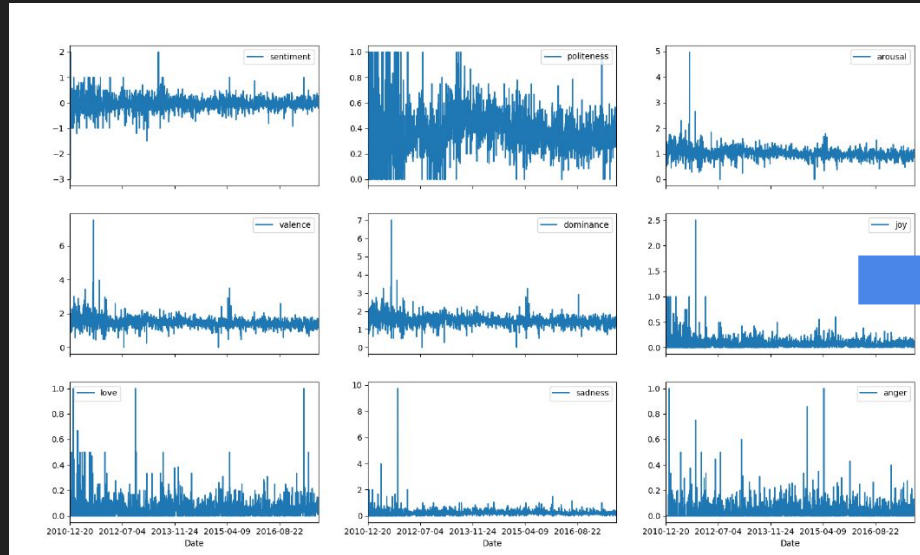
# Cryptocurrencies



# OS Community and Cryptocurrency Market



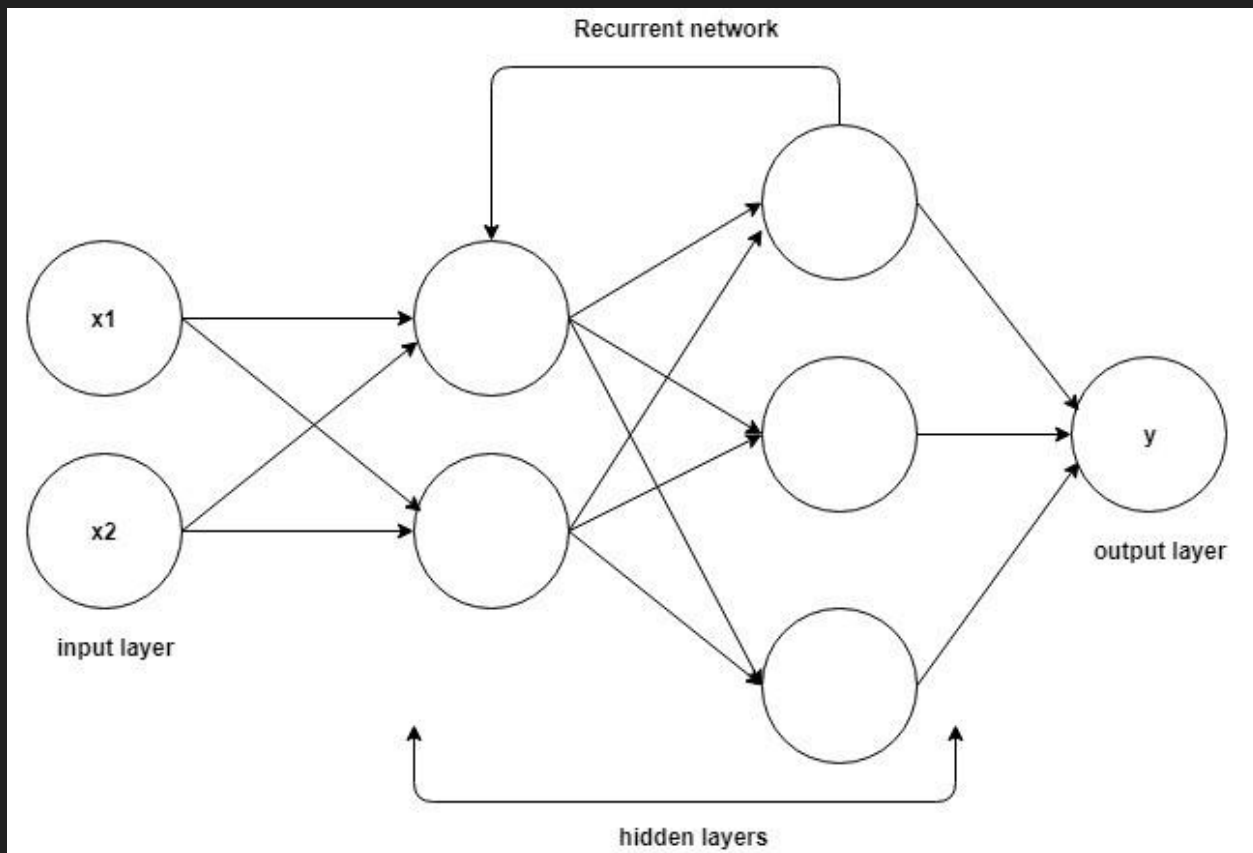
# RQ1: Granger Causality



C. W. Granger. Investigating causal relations by econometric models and cross-spectral methods. *Econometrica: Journal of the Econometric Society*

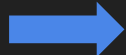
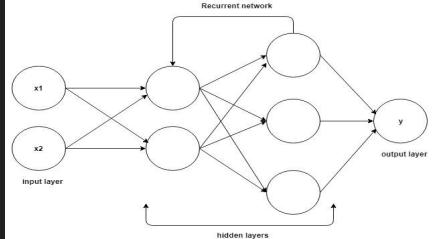
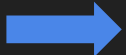
VAD

# RQ2: Cryptocurrency returns prediction with RNN



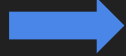
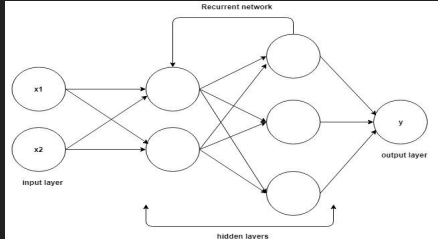
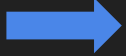
# RQ2: Cryptocurrency returns prediction with RNN

1)



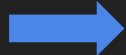
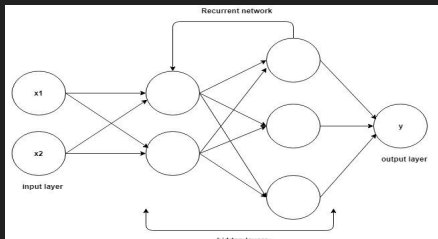
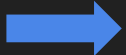
**RMSE**

2)



**RMSE**

3)



**RMSE**



# RQ2: Cryptocurrency returns prediction with RNN



Features	RMSE
1	0.129
2	0.032
3	0.013



Features	RMSE
1	0.178
2	0.082
3	0.113
4	0.114
5	0.114
6	0.114
7	0.048



# Conclusion

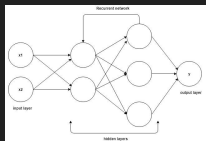


+



## VAD

Granger Causality



Features	RMSE
1	0.129
2	0.032
3	0.013



Features	RMSE
1	0.178
2	0.082
3	0.113
4	0.114
5	0.114
6	0.114
7	0.048



*It has been said that something as small as a Github comment by a blockchain developer, can ultimately cause a typhoon halfway around the crypto market.*