



Booleancoin: Driving Boolean, The AI-Human Hybrid News Accuracy Platform

BOOLEAN: THE AI-HUMAN HYBRID NEWS ACCURACY PLATFORM
NATHANIEL BIDDLE

Contents

| | |
|--|----|
| Mission | 2 |
| Boolean | 2 |
| The Boolean Prioritization Model | 5 |
| Booleancoin: The Token..... | 6 |
| API | 7 |
| Security | 7 |
| Accessibility..... | 7 |
| Development Roadmap | 8 |
| Projected Timeline | 8 |
| Competitors | 8 |
| Legal | 8 |
| Risk of Regulatory Actions in One or More Jurisdictions | 9 |
| Risk of Insufficient Interest in The Boolean Platform or Distributed Applications..... | 9 |
| Risk that Boolean, As Developed, Will Not Meet the Expectations of User | 9 |
| Risk of Security Weaknesses in The Boolean Platform Core Infrastructure Software | 10 |
| Risk of Mining Attacks..... | 10 |
| Risk of temporary network incoherence | 11 |
| Final Note..... | 11 |

Mission

To Combat The Dangers Of Fake News In The Digital Age Through A New Type Of Informational Asset, A Store Of Value Representing The Weight Of The Verified Accuracy Or Inaccuracy Of News And Other Digital Content, And To Provide A Decentralized, Universally Accessible Store Of Such Information.

Boolean

“The tectonic shifts of recent decades in the media ecosystem—most notably the rapid proliferation of online news and political opinion outlets, and especially social media—raise concerns anew about the vulnerability of democratic societies to fake news and other forms of misinformation. The shift of news consumption to online and social media platforms has disrupted traditional business models of journalism, causing many news outlets to shrink or close, while others struggle to adapt to new market realities. Longstanding media institutions have been weakened. Meanwhile, new channels of distribution have been developing faster than our abilities to understand or stabilize them.”

(<https://shorensteincenter.org/combating-fake-news-agenda-for-research/>) Not only do those with unsound reasoning skills have voices in the digital age, but so do those who would lie to users’ faces, proudly and knowingly, providing false information. Boolean will combat these instances of fake news that are becoming more and more prevalent in our media by flagging False content and informing users of Fake News. This is a must have in a world where people are becoming less and less trusting of the media.

Everyone is now a news source because everyone has a voice. This is a positive thing at face value, but it can be inherently harmful to a single-person's ability to remain informed. BooleanCoin's Platform allows for this danger to be remediated by helping to bring the information into one system, have each person's unique voice/news/story give it's vote, and gain insight into what the majority thinks, as well as point out fallacies, inconsistencies, biases, etc. where our system finds them. We take into account source credibility, logical fallacy, and social bias, three of the main issues that lead to acceptance of fake news, and we call them out and inform consumers of the potential that content has to lead them astray.

BooleanCoin's platform Boolean acts to counter these issues, providing the most accurate information and alerting users to dangers of the content they will be consuming, based on the prevailing sentiment of its users and the way their votes land, in concert with the power of our AI-Driven Web Crawlers, which gather information across all corners of the web and interpret and connect the information they find. By alerting content consumers of potential misinformation they will be receiving, we will equip them to consume said content with a clearer lens.

With the help of AI and human intuition, we can begin to gain a picture of what questions need to be answered in the news to clarify about certain issues and what questions can't be answered accurately. This will allow us to categorize and prioritize those issues that seem to be most at risk of disinformation circulation surrounding them.

The power of artificial neural networks/deep learning and the growing efficacy in general problem solving tasks of Artificial Intelligence systems create an environment that didn't exist until just recently. The allowance of the introduction of Oracles, question-answering AI programs into the system to add input, in the form of a Boolean, as well as the providing of degree of certainty, will enable us to gain insight into highly complex data analysis as a means of informing our platform. That coupled with a majority input from human users will help to label content as deceitful or honest, instilling a sense of trust in consumers of that content.

Boolean is a form of Prediction Platform, but one that focuses on and utilizes all of its resources to gather and interpret data regarding the present moment, recent past, and the information available on

the Internet that informs the coming future. Prediction platforms (whether in the form of prediction markets or in the form of our non-market platform for prediction, which is the case for Boolean) have shown great efficacy in the past, the key being an incentive for those who are answering a given question.

Boolean IS NOT A PREDICTION MARKET.

This can't be emphasized enough. We aim to provide solutions and resources for those who must be informed of accurate, relevant data so as to not allow for unintended outcomes of their Business and Political Initiatives. These users range from your average voter to Political Parties that exist and will emerge as an outcome of the Blockchain movement (Cryptopartisanship: <https://steemit.com/crypto/@biddle/crypto-partisanship-could-blockchain-technology-and-cryptocurrency-give-rise-to-a-new-powerful-independent-party>). Adopters of our Platform will be in an advantageous position during the violently shifting Political and Business Landscape.

Our goal is to provide truth to our users and, therefore, in instances of questions which have FACTUAL answers (an example being which team won a basketball game), those will be answered only by Oracles, since they can do a lookup from official stores of data to provide users with accurate information. In regards to more subjective information without a black and white answer, insight is given to try and point out biases, fallacies in content, inconsistencies, contradictions, and other data points. This information will be informed through public discussion, input from our Oracles, and updated regularly based on newly emerging information. Mobile Devices that have Boolean Installed Will Auto Scan Articles/Content Opened By Users And Inform Them Of Any Recent Accuracy Issues. Mobile Notifications will allow the stopping of Fake News Before It Spreads. The fact that these are in real-time will allow empower users to think rationally and will reduce the likelihood that they'll experience Confirmation Bias, the tendency of people to accept what supports their preexisting beliefs and to ignore and reject that which opposes/contradicts it. This is especially important on sites like Facebook, where their Machine Learning Algorithms create an environment that is fertile for Fake News And

Misinformation by only presenting sponsored content that a user is likely to click on, like, or comment on. Boolean will counter this issue.

Metrics regarding what percentage of predictions came from AI, what from humans, accuracy of AI versus humans, accuracy of everyone as a whole will be collected and provided in an open-access, decentralized way. The more users, the more accurate the model. We posit that when you have an entire population with a reasonable, straightforward incentivization and reward system, you have access to a greater self-correcting pool of knowledge and, thus, the most accurate, true depiction of any given issue. This Stochastic Process is the foundation of Boolean.

The Boolean Prioritization Model

With the help of AI and human intuition, we can begin to gain a picture of what questions need to be answered and what questions can't be answered accurately. This will allow us to categorize and prioritize those issues that seem to be most at risk of disinformation circulation surrounding them.

Boolean's Proprietary Prioritization Model uses the VTS Rating that we ascribe to News Content found on the web by our Crawlers, as well as provided by our Users. The VTS Rating Scale takes into account Virality, Topic, And Severity, gives it a score relative to other content, and prioritizes based on that and user input.

Virality: Largely relying on our Web Crawlers, we give a value of Virality to any given contradiction/falsehood that is caught. This value is calculated by taking the number of views of content, the number of interactions (comments, etc.), number of shares, number of platforms the fake news occurs on, etc. This is a measure of the spread of the misleading/misinforming content.

Topic: Through voting on our platform, as well as based on the input of News Experts, we assign a score based on the importance of a topic in regards to the effect it can have on public-opinion, legislation, social repercussion, etc. We categorize different flagged content by their topic, assigning a score based on the importance decided by our team and the public.

Severity: The Severity Score is a rating of how severe the misrepresentation, blatant falsehood, or misinformation/propaganda is. This is based on data gathered by our Crawlers and based on past User Input, weighed against past cases that are similar. The Severity score informs users of how much of a deception a given piece of content is creating.

Booleancoin: The Token

Booleancoin is the Ethereum Blockchain-Based Smart Contract/Token that backs the platform and drives user input, contribution, and economy within it. Only 20,000,000 Booleancoins Will Ever Exist. No Central Minting Function Has Ever Or Will Be Ever Added To The Token. Those with Booleancoin choose questions that are answered and push their portion of influence toward the answering of that given question. This will inform the focus of our Web Crawlers, as well as lead our efforts in user data gathering.

Booleancoin is used to support our Boolean Crawlers' search for information as well as support questions themselves, by opening it up to user input to add weight to it based on Boolean's Proprietary Prioritization Model; by keeping your token on a certain question or by moving your token as your interest in information changes, you will be controlling the collective power of users/bots to inform your decisions effectively. In an age where information is becoming increasingly valuable, you can't put a price on accuracy of data.

BooleanCoin can be used to choose where focus is added on topics; users are rewarded for voting by being given BooleanCoin for their input. Their incentive to only answer questions that they believe they have information about is that they will be rewarded less on their next answer if they get something wrong (too much misinformation, whether intentional or not, will reduce rewards to 0, cause account suspension/termination – there will be a democratic system for this process) and their rewards will increase if they are consistently correct; there is no penalty for not answering questions, so users are incentivized to only answer questions they believe they have compelling, relevant information about.

API

We are developing an API for Boolean, to allow users to integrate our content and services into Enterprise Environments. It will allow Blogging Platforms, Social Media Platforms, Content Sharing Platforms, and Many Other Environments to integrate Accuracy check in order to mediate and be proactive in scrubbing their sites of Fake News and other Misinformation and Propaganda. We will allow integration with Common Development Environments and Popular Content Management Systems (CMS). Our API will be flexible in allowing integration with all of our specified Use Cases, as well as many other workflows.

Security

Security is our number one priority, as fake profiles, bot profiles, etc. can cause intentional or unintentional skewing of data, which can lead to inaccurate information. We will utilize the blockchain, artificial intelligence, and regular auditing of our system in order to maintain security, integrity, and validity. Our team has experience in Penetration Testing, Security Analysis, And Web Development Adhering To OWASP Standards. Additionally, regarding Token Security, Booleancoin's foundation on The Ethereum Blockchain provides an environment that will act exactly as programmed without any possibility of downtime, censorship, fraud, or third-party interference. We will treat the Security of Boolean and Booleancoin as that of a Mission-Critical Application, minimizing downtime to Zero in all cases possible.

Accessibility

Accessibility is something that hasn't been heavily addressed in the Crypto Ecosystem yet, but decentralized applications, as well as the blockchain itself, must be accessible for users with Visual, Auditory, Motor, and other impairments. This is necessary in order for mass adoption to occur.

Boolean will take all reasonable measures to ensure that we meet Section 508 1194.22, Section 508 Revised, and WCAG 2.0 Accessibility Standards to as great a degree as we can. We believe that Digital Accessibility will be in greater demand than ever as the Blockchain economy grows.

Development Roadmap

Projected Timeline

March 2018: Additional Dev Recruitment To Strengthen DevOps

June 2018: Boolean 0.9 To Be Released Into Production For Beta Testing

August 2018: Boolean API 0.9 Released Into Production For Beta Testing

October 2018: Boolean 1.0 Released Into Production (Barring Issues During Beta Test)

December 2018: Boolean API 1.0 Goes Live

Competitors

Boolean is a new kind of platform and we don't have any current competitors in the Blockchain Space or Tech Space. No Platform has provided real-time mobile notifications regarding content that is in the process of being consumed, nor have they countered Confirmation Bias in real-time. We differentiate ourselves through decentralization, open-access to metrics regarding the system, and through our Software Suite, Prioritization Toolset, and Mission, which will have flexible, wide-ranging use in combating the spread of Fake News.

Legal

The following Terms and Conditions ("Terms") govern the use of Booleancoin and Boolean, both of which run on the Ethereum Blockchain in whole in the case of Booleancoin and in part in the case of Boolean, The AI-Human Hybrid News Accuracy Platform. Prior to any use of the Booleancoin, Boolean, and the Ethereum Platform in general, the User confirms to understand and expressly agrees to all of the Terms. All capitalized terms in this agreement will be given the same effect and meaning as in the Terms. The group of developers and other personnel that is now, or will be, employed by, or contracted with Booleancoin.Com, Boolean, Or GainingSteem.Com, will be referred to as "The Boolean Team". The Platform will be developed by persons and entities who support Booleancoin, a Smart Contract On The

Ethereum Blockchain, including both volunteers and developers who are paid by nonprofit entities interested in supporting our Platform.

The user acknowledges the following serious risks to any use the Boolean, The Ethereum Blockchain, and Smart Contracts On The Ethereum Blockchain and expressly agrees to neither hold The Boolean Team, GainingSteem.Com, Boolean, Or Booleancoin.Com responsible should any of the following risks occur:

Risk of Regulatory Actions in One or More Jurisdictions

Boolean, Booleancoin, as well as the whole of the Ethereum Blockchain, could be impacted by one or more regulatory inquiries or regulatory actions, which could impede or limit the ability of Boolean to continue to develop itself on top of the Ethereum Platform, or which could impede or limit the ability of a User to use Boolean or any function described prior.

Risk of Insufficient Interest in The Boolean Platform or Distributed Applications

It is possible that Boolean will not be used by a large number of external businesses, individuals, and other organizations and that there will be limited public interest in the services provided by Boolean in regard to minimizing the effects of Fake News in our culture. Such a lack of interest could impact the development of Boolean and It's Uses And Growth as a Platform, as well as Booleancoin's Growth. It cannot predict the success of its own development efforts or the efforts of other third parties.

Risk that Boolean, As Developed, Will Not Meet the Expectations of User

The User recognizes that Boolean is under development and may undergo significant changes before release. The User acknowledges that any expectations regarding the form and functionality of Boolean held by the User may not be met upon release of Boolean, for any number of reasons including a change in the design and implementation plans and execution of the implementation of Boolean and Booleancoin.

Risk of Security Weaknesses in The Boolean Platform Core Infrastructure Software

Boolean rests on The Ethereum Platform rests on open-source software, and there is a risk that The Boolean Team, or other third parties not directly affiliated with The Boolean Team, may introduce weaknesses or bugs into the core infrastructural elements of The Boolean Platform causing the system to lose Booleancoin stored in one or more User accounts or other accounts or lose sums of other valued tokens issued on the Ethereum Platform.

Risk of Mining Attacks

As with other cryptocurrencies, The Ethereum Blockchain, which is used for Boolean and Booleancoin is susceptible to mining attacks, including but not limited to:

- Double-spend attacks
- Majority mining power attacks,
- “Selfish-mining” attacks
- Race condition attacks.

Any successful attacks present a risk to the Ethereum Platform and, in turn, Booleancoin, expected proper execution and sequencing of ETH transactions and Smart Contract transactions therein, and expected proper execution and sequencing of contract computations. Despite the efforts of The Boolean Team, known or novel mining attacks may be successful.

Acknowledgment, Acceptance of all Risks and Disclaimer of Warranties and Liabilities **THE USER EXPRESSLY KNOWS AND AGREES THAT THE USER IS USING Boolean, Booleancoin, and THE Ethereum PLATFORM AT THE USER’S SOLE RISK. THE USER REPRESENTS THAT THE USER HAS AN ADEQUATE UNDERSTANDING OF THE RISKS, USAGES AND INTRICACIES OF CRYPTOGRAPHIC TOKENS AND**

BLOCKCHAIN-BASED OPEN SOURCE SOFTWARE, ETH PLATFORM AND ETH. THE USER ACKNOWLEDGES AND AGREES THAT, TO THE FULLEST EXTENT PERMITTED BY ANY APPLICABLE LAW, THE DISCLAIMERS OF LIABILITY CONTAINED HEREIN APPLY TO ANY AND ALL DAMAGES OR INJURY WHATSOEVER CAUSED BY OR RELATED TO RISKS OF, USE OF, OR INABILITY TO USE, ETH OR THE Ethereum PLATFORM UNDER ANY CAUSE OF ACTION WHATSOEVER OF ANY KIND IN ANY JURISDICTION, INCLUDING, WITHOUT LIMITATION, ACTIONS FOR BREACH OF WARRANTY, BREACH OF CONTRACT OR TORT (INCLUDING NEGLIGENCE) AND THAT NEITHER Boolean, Booleancoin, GainingSteem.Com, Or The Boolean Team SHALL BE LIABLE FOR ANY INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY OR CONSEQUENTIAL DAMAGES, INCLUDING FOR LOSS OF PROFITS, GOODWILL OR DATA. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OF CERTAIN WARRANTIES OR THE LIMITATION OR EXCLUSION OF LIABILITY FOR CERTAIN TYPES OF DAMAGES. THEREFORE, SOME OF THE ABOVE LIMITATIONS IN THIS SECTION MAY NOT APPLY TO A USER. IN PARTICULAR, NOTHING IN THESE TERMS SHALL AFFECT THE STATUTORY RIGHTS OF ANY USER OR EXCLUDE INJURY ARISING FROM ANY WILLFUL MISCONDUCT OR FRAUD OF The Boolean Team, Boolean, Booleancoin.Com, Or GainingSteem.Com.

[Risk of temporary network incoherence](#)

See The Ethereum Platform's Policy, which is preparations for potential downtime of up to or greater than 24 hours, knowing that our Support team will be responsive in P1 issues like these to the best of our abilities.

[Final Note](#)

Boolean, Booleancoin.Com, Or GainingSteem.Com is finally not liable for:

- Unavoidable casualty
- Delays in delivery of materials

- Embargoes
- Government orders
- Acts of civil or military authorities
- Lack of energy
- Any similar unforeseen event that renders performance commercially implausible.