



Kimera has produced a series of videos which provide a simplified way to understand the underlying concepts of our Artificial General Intelligence (AGI) and KIMERA Token Economics.

We encourage the reader to watch these videos for a condensed understanding of the concepts and [technical contents of this whitepaper](#).



Whitepaper

April 2018

NOTICE

If you are not sure about joining into the following Initial Coin Offering (ICO), please consult with professional advisers in the fields of legal, tax, and financial.

LEGAL DISCLAIMER

Purpose

This document introduces recipients to the operation of Kimera Systems, Inc. ("Kimera"); Artificial General Intelligence ("AGI"); Kimera's Nigel™, the world's first human-like artificial intelligence (AI); the network to be built around Nigel; and the tokens that will operate in that network. Recipients should carefully consider and evaluate each of the following terms and risk factors in assessing the contents of this White Paper, but not to the exclusion of other relevant documents and information. It is important to recognize that this White Paper is not intended to be comprehensive, is not intended and shall not be deemed to be a prospectus, and no information conveyed herein constitutes or forms a part of any contract or relationship between Kimera and any recipient.

This document is for informational purposes only. It is not intended to be legal, financial, professional, tax, or other advice, advertising, or a recommendation to take any action.

The nature of the Tokens in general

The Tokens are intended as utility tokens but regulated as securities.

The Securities and Exchange Commission ("SEC") in the United States has advised through recent regulatory and enforcement actions that, although whether any particular series of tokens is a security depends on the facts and circumstances of the token and ICO, in general they have found unpersuasive attempts to classify utility tokens as not subject to regulation. In each of the public disclosures of enforcement action from the SEC in 2017 and 2018, the SEC is yet to find a token that is not a security. Therefore, we have decided to offer our tokens under the provisions of applicable securities law, such as, with regards to the SEC, Regulation A and Regulation S.

Those who choose to participate in our ICO should be knowledgeable about both cryptocurrency and recent developments in artificial intelligence. The existence of AGI cannot be proven without substantial further development, and participation in our ICO should only be taken on by those with substantial know-how.

There are significant risks regarding what we know about Nigel, and the market for Nigel. There can be no guarantee of income or profit.

There is no guarantee that our tokens will grow in value, or that any market for the tokens will develop. If the market develops there can be no guarantee that the tokens will not drop in value, as they have no

intrinsic worth. The value of the tokens hinges heavily on the performance of Nigel and Kimera's network/platform, Kimera's public image, and Kimera's success in marketing, advertising, and improving Nigel.

Kimera claims that we invented the first ever artificial general intelligence, and the token will be used to complete and incent transactions that will improve our knowledge of AGI. Nigel doesn't yet have any established market value and may never result in a commercially viable business. There are significant risks associated with Nigel, not the least of which is the absence of current regulation for AGI – if any state actor or agency determines that AGI should be regulated, such regulation may interfere with the developing business model of Kimera.

If, due to regulation or otherwise, the intended transactions in our Tokens are not viable then the value in developing Nigel will not be recognized. Recipients should understand that their purchase may not result in a valuable or useable token, and the value of their purchase is subject to partial or complete loss.

The Tokens are not equity in any company and carry no voting rights. The tokens are an intangible property which are subject to rules and control of Kimera.

The Tokens do not guarantee or convey any voting or other rights in the ownership, operation, or management of Kimera Systems, Inc. In the event of unforeseen circumstances, the objectives stated in this White Paper may be changed. Despite the fact that we intend to reach all goals described in this document, all parties involved in the purchase of Tokens do so at their own risk.

All Token orders will be deemed final. You acknowledge that you will be bound by your commitment and will not be entitled to any refund or reimbursement.

There are general risks associated with Ethereum blockchain and other early-stage technology and software.

Blockchain-based technologies, the related software applications and business models, are still being developed and there are inherent risks that the technologies, software, or business models might not function as intended. We will rely on the Ethereum protocol, which means any failure in the Ethereum protocol could harm the trading of our tokens. There is a risk of bugs, weaknesses, or vulnerabilities in the software which could lead to complete or partial loss of tokens, and such vulnerabilities have previously affected cryptocurrencies offered by others with deleterious effects on those who transacted in such coins.

Blockchain mining attacks pose serious threats to the blockchain, the networks running on the blockchain, and to issuers and purchasers of tokens. Other forms of cybertheft and cybercrime put cyber currencies at risk, risk to any money Kimera might store for recipients in escrow wallets or to recipients' tokens when issued. Because the development of this technology is still early stage, certain risks cannot be foreseen, and vulnerabilities will be exposed only through experience.

Regulatory Uncertainty

Cybercurrency trading is still generally unregulated, but many agencies have been investigating regulation. In recent statements, regulatory agencies such as the SEC have identified the lack of regulation as an impediment to a successful marketplace. While we welcome regulation generally, our Tokens may be affected by the implementation of new regulations in unanticipated ways. In fact, we may need to cease operating in certain jurisdictions altogether depending on the regulations.

In the United States, where Kimera's principal business office is located, there are several agencies and regulatory bodies, together with state and provincial governments, each of whom may claim the right to issue governing regulations affecting Kimera's Tokens. In most cases, there are no policy statements from the regulatory agencies upon which Kimera can rely at the time of this white paper.

Despite our due diligence there may be further risks we cannot anticipate at this time.

Forward-Looking Statements

Certain matters discussed in this document are about our future performance including the future revenues, earnings, strategies, and prospects of Kimera Systems, Inc. and the Nigel AGI, and may constitute forward-looking statements. These statements might be identified by words such as "expect," "look forward to," "anticipate," "intend," "plan," "believe," "seek," "estimate," "will," "project," or words and phrases of similar meaning.

Such forward-looking statements are based off certain expectations and assumptions of the Kimera Systems, Inc. management. These forward-looking statements are subject to a number of risks, uncertainties, and factors, including those listed throughout this document and specifically in the Disclaimer section at the end. Should one or more of these risks or uncertainties materialize, or should the underlying expectations or assumptions prove incorrect, actual results, performance, and achievement of objectives could materially vary from those described in the forward-looking statements.

Recipients are cautioned not to place undue reliance on these forward-looking statements in making any personal decision.

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A WORD FROM OUR FOUNDER & CEO

Scientists believe *Artificial General Intelligence (AGI)*, a machine-based intelligence with the capacity for human level reasoning, will change the future of humanity more than any other invention in history.

This idea has resonated with me since I was gifted my first computer in 1983: A Sharp MZ-700. It was on that machine that I began to understand the enormous potential of technology and envision a future where the artificial intelligence (AI) seen in science fiction movies had the potential to become reality and change how we interact with the world. Imagine a society without poverty, a fair and competitive marketplace, cures for devastating diseases, and countless other possibilities. This is the vision that exhilarates me and continues to drive my passion for AGI.

In 1997, I began working on my first AI project using speech recognition to identify complex patterns and transcribe them into readable script. It was an achievement for me, but still did not hit the mark on my quest for “real” artificial intelligence.

This prompted me to dig deeper into the fundamental questions regarding AGI; What exactly is Intelligence? Is it unique to humans or is it something that can be found throughout the universe? If intelligence is universal, is there a common primary element?

The answers to those questions led me to create a computer algorithm with the ability to mimic universal general intelligence: Kimera’s AGI.

The next step towards reaching Kimera’s AGI’s full potential was to develop an effective model for driving data gathering and learning. Enter Nigel Deighton, a researcher with Gartner Research. With Deighton’s assistance, we developed a decentralized economic model which enables users, developers, device manufacturers, and network operators to benefit from our AGI network without being influenced or controlled by powerful organizations and governments. Together, we worked to refine our technology, consulted with AI experts, obtain Angel funding, and experimented with different go-to-market plans. Great strides were made along the way towards developing and improving our AGI, but we also faced great personal tragedy with the passing of Nigel in 2013. This unexpected loss of a colleague and friend led us to name our core AGI technology in his honor: *Nigel AGI*.

Kimera has been continuously improving our technology, testing its veracity, and assembling a strong core team. Changing the world isn’t easy but I am confident we have the building blocks needed to bring to life the vision I had as a young boy many years ago. I invite you to join us on our journey.



Mounir Shita
Kimera Systems, Founder & CEO

INTRODUCTION

Kimera wants to move humanity forward by solving the challenges we face as a species and disrupting an economic model which currently disproportionately benefits the wealthy. Funds raised from an Initial Coin Offering (ICO) will be used to power this vision by integrating two technologies: Artificial General Intelligence (AGI) and blockchain smart contracts.

"Inventing [AGI] would be one of the greatest advances in the history of science. It would speed up the progress of knowledge across the board, and change the world in ways we can barely imagine."

— Pedro Domingos, Professor, University of Washington

Based on our initial 2005 research, Kimera created and successfully demonstrated a fully functional AGI solution back in 2010. Since that time, we've continued evolving our technology and incorporated learnings from two beta tests which had over a thousand individual participants worldwide.

ARTIFICIAL GENERAL INTELLIGENCE

Artificial General Intelligence is the idea of machines thinking at, or beyond, human cognitive levels. AGI has eluded scientists for over six decades and is largely presented as narrow machine learning, where a computer is programmed to solve specific problems. While governments and a handful of corporations are pouring research money into the pursuit of AGI, a realistic approach has eluded scientists — until now.

Kimera began developing its AGI technology by finding the answer to a basic scientific question: What is Intelligence? The answer led us to develop a General Theory of Intelligence. A concept, grounded in physics, which postulates that intelligence is the process of changing the composition of spacetime. This is the basis of our AGI system.

Producing a theory of intelligence that is described at the fundamental particle level allowed us to develop a machine algorithm for implementation that differentiated us from other AGI research and solutions. While other AI companies are largely focused on recognizing patterns and making predictions, Kimera's solution is based upon a universal theory of intelligence that uses a single algorithm to solve virtually any problem.

AGI is a big claim that should not be taken lightly and viewed with scientific skepticism. That is why Kimera was delighted the Rochester Institute of Technology (RIT) publicly announced they will be the first university to integrate Kimera's AGI into its teaching and research programs. RIT has conducted due diligence into the scientific theory underpinning Kimera's technology, the algorithm supporting it, and the overall technical architecture. RIT will be using it for faculty and graduate research, as well as validating its current implementation. (<https://www.rit.edu/news/story.php?id=66192>)

ECONOMICS

With the emergence of human-like thinking machines, a natural concern is job automation and the impact AGI would have on existing social and political structures. The problem is not job automation but rather an economic model that rewards large companies and governments at the expense of individuals. To

correct this imbalance, Kimera has designed a decentralized economic model that supports their intelligent network and empowers the individual.

Through Kimera's AGI technology we've transformed the global network into an intelligent entity that understands people and businesses, and anticipates what participants require to achieve their goals. Whether purchasing a single cup of coffee or helping a group of scientists discover cures for cancer, Kimera will lead participants to the right resources at the right time. Such AGI requires an exceptional amount of knowledge derived from continued observation of how our society functions.

To accomplish the requisite data collection, we developed an economic model that rewards participants, developers, and device manufacturers. Whether they use it to teach, create, or travel the world; the more active a Kimera participant is, the more sensor data is gathered from their activities. This automatically performs the extremely valuable task of information gathering an AGI requires to increase its efficiency and learn about spacetime. As an incentive, our model rewards people with Kimera tokens for their sensor data. The result is an economic model designed to compensate participants as they live a full life free of corporate and government control.

You can read more about this economics model in the token economics section.

DATA CONTROL

AGI is a powerful tool with the potential to change humanity, making it an attractive asset for abuse by bad actors. By decentralizing control of the system, we've embedded a solution to combat this possibility right into the design. With its great potential to change humanity, AGI should be controlled by humanity, not large corporations, single entities, or governments.

We encourage the reader to watch Kimera's videos for a condensed understanding of the concepts and technical contents of this whitepaper.



VISION: MOVING HUMANITY FORWARD

Society has advanced more in the past several decades than it has in a millennium. Despite all our technological and societal advances, we struggle to overcome some of the same fundamental challenges—global poverty, disease, and the distribution of wealth and power, to name just a few. Humanity has a long way to go.

Kimera envisions a future where people are surrounded by intelligent things that can understand each individual, anticipate their goals and proactively assist them in everyday life. This could translate into helping an individual book a plane ticket or helping all of society reducing homelessness. In this future, machines augment our thinking and either automate some decision making or proactively deliver the content or services needed to assist in the decision-making process.

Unlike today's digital app stores and online social networks where people actively seek out resources, Kimera's solution automatically handles search and discovery behind the scenes. The capability of a truly intelligent machine will blend into the background of our lives, freeing people from constantly having to operate their devices and instead allow them to focus instead on living their lives to their fullest potential.

The AGI fueling these machines, or objects, will be a non-sentient AGI that is completely void of "selfish goals" and instead focused on helping people pursue their individual goals. The aggregate result will be revolutionary impacts on society.

MISSION: EMPOWERING GLOBAL INTELLIGENCE

To move humanity forward, AGI needs an enormous amount of sensor data gathered from connected devices. Some of these devices already exist and are currently generating data, such as smartphones or smartwatches. Other devices exist, but aren't yet connected to the global network. The 20 billion devices¹ that are currently connected to the network are enough to begin raising AGI from infancy, but a fully mature AGI will require far more.

Elon Musk & Bill Gates believe that AGI will create a malevolent super intelligence in a “few minutes or hours after AGI is turned on.”² What their arguments fail to account for is where all the data will come from and how it will be processed.

AGI will become an “observer” which builds knowledge over time to a point that is larger than what exists today. To create this amount of deep knowledge, Kimera has designed an entire ecosystem that encourages users, developers, network operators, device manufacturers, and others to participate in the network by connecting their devices and supplying data. This will help create a global intelligent network that powers the next trillion devices.

¹ Internet of Things (IoT) connected devices installed base worldwide from 2015 to 2025 (in billions): <https://www.statista.com/statistics/471264/iot-number-of-connected-devices-worldwide/>

² Elon Musk & Bill Gates on The Threat of Artificial Intelligence: https://www.youtube.com/watch?v=0pz_XDC8YqY

THE PROBLEM: TODAY'S ECONOMIC MODELS

Growing the number of connected devices to trillions is a large business challenge for device manufacturers and network operators. To address this issue, Kimera spent several years developing a solution in consultation with the telecommunications industry. This collaboration has resulted in a 2014 nomination for Kimera as the most disruptive startup by the Telecom Council of Silicon Valley.³

Today, if users want apps they go an app store, such as Google Play Store. If someone wants to see what their friends are doing, they go to a social network such as Facebook. If a user wants a ride, they go to a ridesharing service like Uber. None of these companies create the content or services being consumed, however. They are simply middlemen, taking a piece of the revenue with each transaction. These middlemen generate over USD 4 TRILLION annually, amounting to 5% of the entire annual World GDP.

These middlemen companies thrive because they are currently the only viable means for providing users the data they want. The losers in the current model are device manufacturers and network operators. As hardware is commoditized, device profit margins drop while network operators spend billions of dollars supporting a growing number of devices and upgrading the network for speed and capacity.

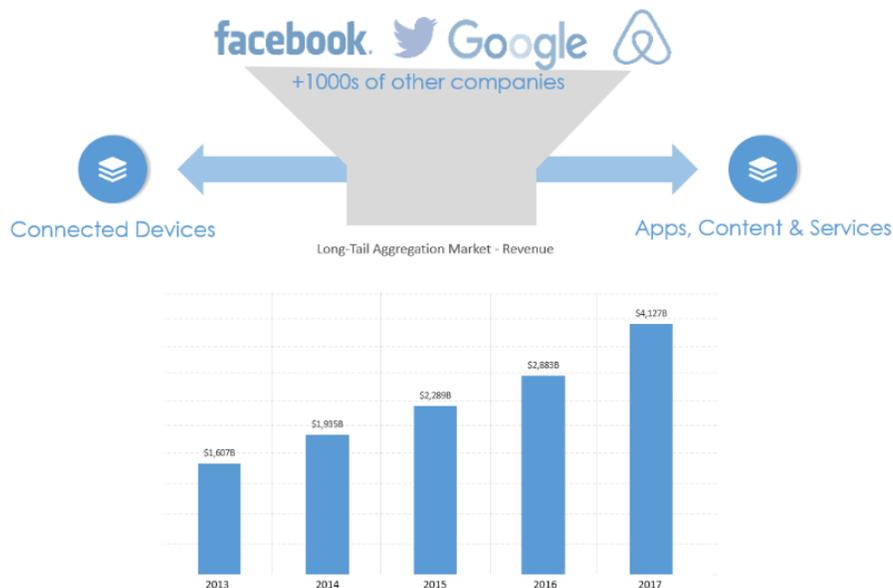


Figure 1: Current passive internet model (source: statista.com)

Non-connected manufacturers are also wary of adding connectivity with no prospect of a return. Companies have expressed to Kimera the same sentiment: The moment you add connectivity to something, the OS (e.g. Google) takes over the product and owns most all monetization opportunities, as well as the customer relationship. This economic paradigm is hindering the world from rapidly becoming

³ <http://blog.telecomcouncil.com/blog/6th-annual-spiffy-awards-at-tc3-2013/>

interconnected through trillions of devices. The very same devices needed to grow and mature AGI to its full potential.

To eliminate the need for these middlemen and pave the way for connected devices, Kimera's technology integrates AGI at the device and network level to directly establish peer-to-peer connections between users, devices and data.

THE PROPOSED MODEL

The reason middlemen are thriving today is because devices and networks lack intelligence. For example: Without Facebook, it would be more difficult to connect with friends and without Uber, it would be more inconvenient to find a ride. These middlemen are providing services which make the Internet easier to use. It also makes them dangerous and prone to manipulating people and using their personal data for nefarious reasons. The recent Facebook Cambridge Analytica scandal is an excellent example of the risk of personal data abuse by middlemen, and there are many more examples.

Kimera's AGI solves this problem by providing devices and networks the collected intelligence needs to establish automated peer-to-peer (P2P) connections. Doing this allows these nodes (e.g. devices, apps and content) to cooperate, share software code, personalize content, and deliver unique user information and experiences without involving a middleman. People will continue to buy what companies sell, but in our model the revenue (USD 4 trillion+) flows back to device manufacturers, software and service providers, network operators, users, and everyone producing data from their devices who are connected through their use of Kimera's technology.



Figure 2: AGI-enabled Proactive Network

INNOVATION AND NEW INCOME STREAMS

When a critical mass of devices are Kimera's AGI, people will generate data from the P2P connections that form automatically from their normal daily activities. As more users come aboard, the more data will be generated and the more user revenue will accrue. A number of dreary daily tasks (such as a subway commute) can be monetized as data-generating activities.

With more data, the AGI gets better and better, which then attracts more developers and users. This virtuous cycle accelerates the progress towards AGI.

On the economic front, this addresses a number of small but pernicious problems that exist within the current economy. Everything from becoming ‘anti-fragile’ through multiple streams of income, to the sluggish velocity of money⁴ that developed economies have suffered under for almost two decades, are mitigated.

Imagine the impact of a daily subway commute generating a little extra money a day for a passenger, or a party goer generating a few extra dollars from their activity. This sort of monetization creates velocity of money where previously there was none. This not just increases the consumption and participation in data-generating activities, but early users have every incentive to recruit more users, since both will earn more from this increased volume of data.

For device manufacturers, the release of brutal margin pressure frees up a vast amount of pent up hardware innovation that was not cost effective before due to the aforementioned middlemen. As smaller and more specialized devices become viable, the network grows. Under Metcalfe’s Law, the value of the network increases as a *square* of the number of nodes. When device manufacturers can finally make more devices ‘smart’, we will finally attain the overdue benefits of an intelligent network which will lead towards a goal of a trillion connected devices. This is an added reason for investors from countries heavily involved in device manufacturing to participate in this ICO. Their role could pay dividends for aspects of their local economies.

EVOLVING THE PASSIVE NETWORK INTO A PROACTIVE GLOBAL NETWORK

Proactive networks offer users a system supported by intelligent, connected devices – not just smartphones, computers and cars, but all objects connected to the network. Think about the possibilities for wearables, furniture and any other thing in which sensors can be placed. With the potential for explosive growth in the number and type of connected devices, AGI can better learn about reality, discover problems and assist humanity.

INTELLIGENT PEER-TO-PEER CONNECTIONS

The elegance of Kimera’s distribution model is that its peer-to-peer connections are **not** competing against the incumbent middlemen. Instead, they are bypassed, making the human-machine interface far more aligned with innate human intelligence.

The trillions of dollars currently being collected by these middlemen will not disappear. People will continue paying for things and companies will continue delivering advertisements, but by distributing revenue to people, device manufacturers, network operators and software/content developers, there is a financial incentive for manufacturers to add connectivity to their *things* and effectively put us on a path to the next trillion devices.

These trillion devices, enabled by peer-to-peer connections, will deliver the sensor data needed for Kimera’s AGI to acquire the knowledge needed to move humanity forward and solve problems, both small and large, for the betterment of all.

⁴ <http://atom.singularity2050.com/4-the-overlooked-economics-of-technology.html>

EMPOWERING INTELLIGENT NETWORKS

From a technical perspective, Kimera's goal is to transform the global network from passive to proactive. For example, we believe AGI should be intelligent enough to call a cab automatically when you complete your dinner and already knows your desired location.

Kimera's AGI utilizes a 3-layer decentralized architecture (more technical information in technology section):

- Layer 1: On the devices themselves
- Layer 2: An open-source agent that people can host anywhere they want on the global network
- Layer 3: An AGI Node which will initially be hosted by Kimera and will expand to be hosted on a network anywhere in the world

Kimera's AGI is an infrastructure technology where AGI Nodes running on networks around the globe deliver information about how to establish peer-to-peer connections to any other network-connected device.

AGI may be thought of as an infrastructure technology. Consider the following example:

A human who wants to exit through a doorway will first notice whether the door is open or closed. It is the brain that comprehends and evaluates the position of the door and, if it is closed, the brain will communicate to the appropriate muscles the necessary actions the body needs to take to open the door. In other words, it is the brain that determines what action is required and to communicate with the body to complete the task.

Similarly, an AGI Node acts as the brain and the devices—software applications, content and services found across the global network—act as the body parts. As the AGI Node understands what needs to change in our environment to move us closer to realizing our goals, it tells these “body parts” how to behave to increase the probability of influencing changes in the environment and achieving the intended goal.

The result is a network that proactively establishes peer-to-peer connections across the global network to bring together the right agents, software and content to influence the right changes in the environment.

These peer-to-peer connections provide great benefits to participants and software and content developers:

- 1) Participants will notice that some decision making becomes autonomous. How much authority an Agent has for autonomous decision making is controlled by each person.
- 2) When Agents cannot, or do not, have authority to make autonomous decisions, the right software is automatically delivered to people's devices, providing people with the tools they need to move closer to their goals.

- 3) Software developers who develop these applications (be it a shopping list, profile viewer, public transportation application, etc.) don't have to worry about app distribution and marketing. Once the AGI Node sees a match between a person's need and the value of an app, the AGI Node will recommend to a person's Agent to present the app on their device.

REDUCED MIDDLEMEN RELIANCE

Providing another layer of elegance in Kimera's model is our inclusion of device manufacturers, network operators and software/content developers. By offering manufacturers a financial incentive for adding connectivity to their things, we have effectively put Kimera's AGI on a path to acquiring more information from the next trillion devices and redirecting the trillions of dollars currently being collected by the incumbent middlemen. Because the AGI-enabled human-machine interface is far more aligned with human intelligence based on the information gathered from trillions of devices, there is less need for middlemen.

TECHNOLOGY

The current race for AGI could be described as a “modern day Manhattan Project,”⁵ with governments and corporations, such as Google, investing billions of dollars in the race to be the first to achieve AGI. Even Russian President Vladimir Putin has weighed in, stating that AI is key to beating the United States in defense.⁶

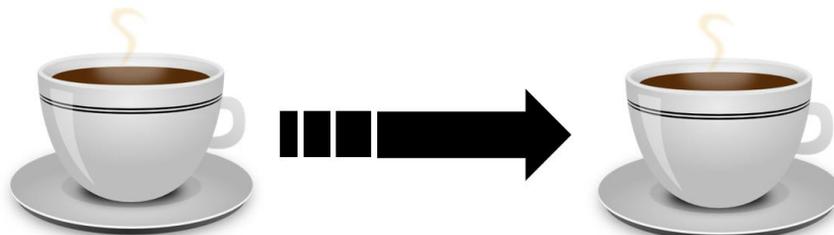
No matter a person’s personal politics, the power of AGI is undeniably immense. So, how did Kimera achieve AGI when scientists in general believe it is decades, even centuries, away?

GENERAL THEORY OF INTELLIGENCE

The answer is in our approach to AGI. While most researchers are focused on neuroscience and cognitive science, we believe the best path to AGI is in understanding the nature of intelligence. When we first started our quest for AGI we asked the question: What is intelligence?

Our research efforts first suggested an assumption that more intelligent lifeforms are effectively better at achieving a variety of goals than lesser intelligent lifeforms. What does it mean to achieve a goal? This led Kimera to examine intelligence at the most fundamental level of spacetime itself.

Take for instance the goal of moving a cup from one side of a table to the other. It is a simple goal that can easily be achieved. But how can achieving this goal be described?



From the most basic perspective of physics, this new state can be described as a collection of particles, the cup, being moved to a new location, changing the composition of spacetime. The new version of spacetime is interpreted as achievement of this goal.

While the cup example is simplistic, it turns out that any imaginable goal, easy or complicated, requires the movement of particles in order to achieve the desired result. There is no goal that mankind has been able to conceive of that can be accomplished without moving particles. This led Kimera to postulate: Intelligence is the process of changing the composition of spacetime.

⁵ <https://www.recode.net/2014/1/27/11622778/more-on-deepmind-ai-startup-to-work-directly-with-googles-search-team>

⁶ <https://phys.org/news/2018-01-artificial-intelligence-weapon-cold-war.html>

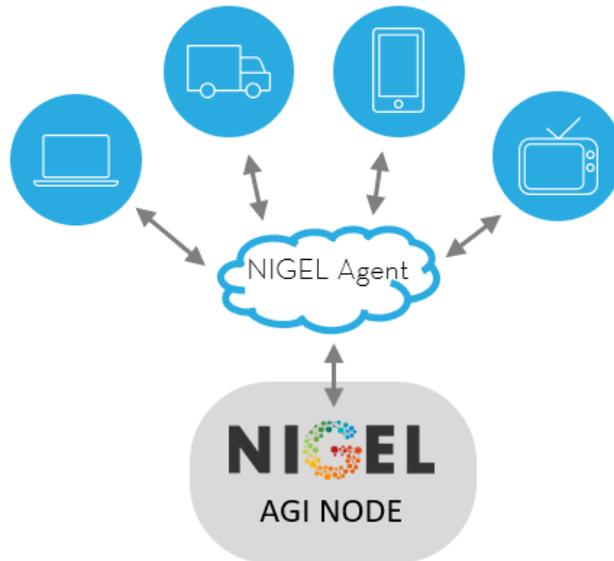
Once we could describe intelligence, we developed a computer algorithm which we named “Nigel AGI” to honor Nigel Deighton, our late former colleague. Kimera will provide an in-depth review about our General Theory of Intelligence in a subsequent publication to be made available to the public on our website.

ARCHITECTURE

Due to its very nature, AGI cannot be designed to solve a specific problem; instead it must be raised. It is the architecture, however that determines its overall abilities. Because it is practically impossible to develop a system that can do everything, our architectural design is based on three key tenets:

- 1) Privacy - Personal information should remain private and under user control
- 2) Extensible - Nigel AGI needed to be “raised” and would become more valuable over time
- 3) Decentralized – System should be controlled by humanity, not powerful organizations

To achieve these goals, we built the Nigel AGI on a three-tiered architecture as shown below.



Layer 1 – The Nigel Middleware

The first layer is the Nigel device middleware, a piece of software that can be integrated into the device to manage sensor data acquisition and execution of intelligence. The technology can be integrated as high up as the application layer, which is Kimera’s first intent, but device manufacturers can integrate it deep into the operating system to achieve “native device intelligence.”

Layer 2 – The Nigel Agent

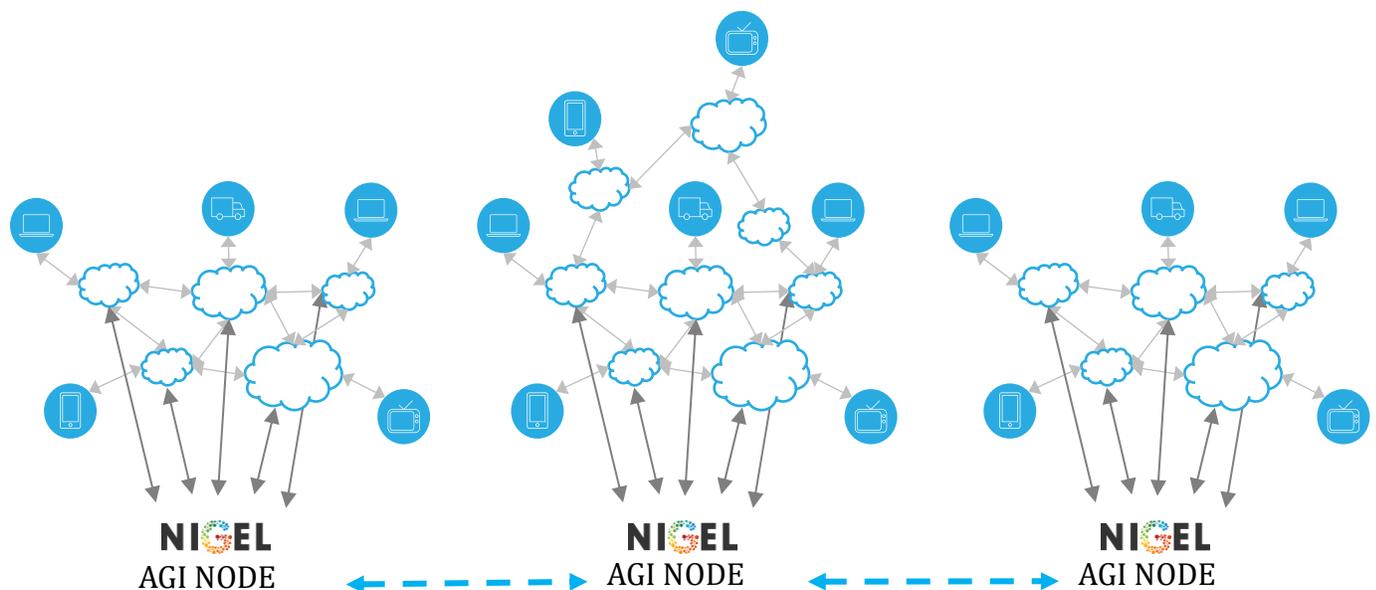
The second layer is the Nigel Agent. Unlike current data acquisition models incorporated by companies such as Google and Facebook, Kimera believes all data created by a person should be delivered to the person’s Nigel Agent and stay within their control.

These agents will be open-sourced and can be hosted anywhere in the world, providing people with unprecedented control of their own data. To help people get started, Kimera will host these agents on our systems. Kimera encourages users to move their agents as soon as possible.

Layer 3 – The Nigel AGI Node

The final layer is the Nigel AGI Node, where the core algorithm resides that includes the general machine learning and applied intelligence. This layer will be productized and made available to network providers, including large public networks like AT&T or Comcast, or corporate private networks, or small business networks like a neighborhood coffee shop or home networks.

By distributing AGI Nodes across the global network we achieve a full decentralization of all layers as shown in the diagram below.



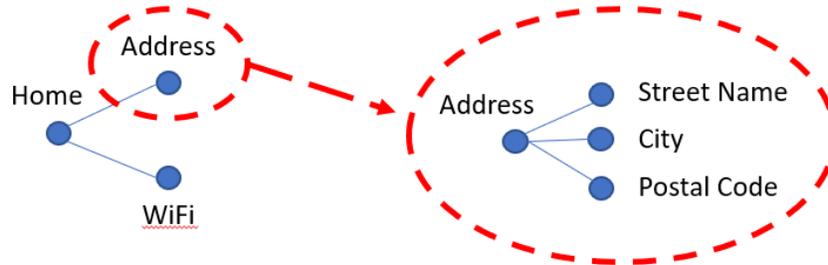
To avoid malicious attack, AGI Nodes synchronize their learned knowledge using a consensus-based blockchain technology. For a powerful organization or government to take over the network of AGI Nodes, they would need to take over 50%+1 of all AGI Nodes. This can easily be prevented if people start adding AGI Nodes to their home networks resulting in true democratization of maybe the most powerful technology in humanity.

KIMERA'S AGI ALGORITHM

In 1986, Geoffrey Hinton co-authored a paper that remains central to the modern explosion of artificial intelligence. Hinton has since stated that his breakthrough method should be dispensed with however, and a new path to AI found. Below is the high-level overview of Kimera's solution using principles from quantum mechanics. A detailed explanation of our core algorithm is beyond the scope of this whitepaper however, and will be made available via our website.

Knowledge Representation

Kimera has developed a technique called *Subnet Modeling* which represents knowledge in small graphs called subnets. Each subnet is completely independent. However, each node within a subnet is itself another subnet. Take for example the subnet for the concept of “home.” In a simplified way, it may look like the subnet below to the left.



Since all nodes in every subnet represent their own subnets, we can take the “Address” node and examine its own subnet. These way of representing knowledge allows us to describe a piece of knowledge down to, theoretically, the particle level (which of course is not practical).

Keeping subnets decoupled allows us to:

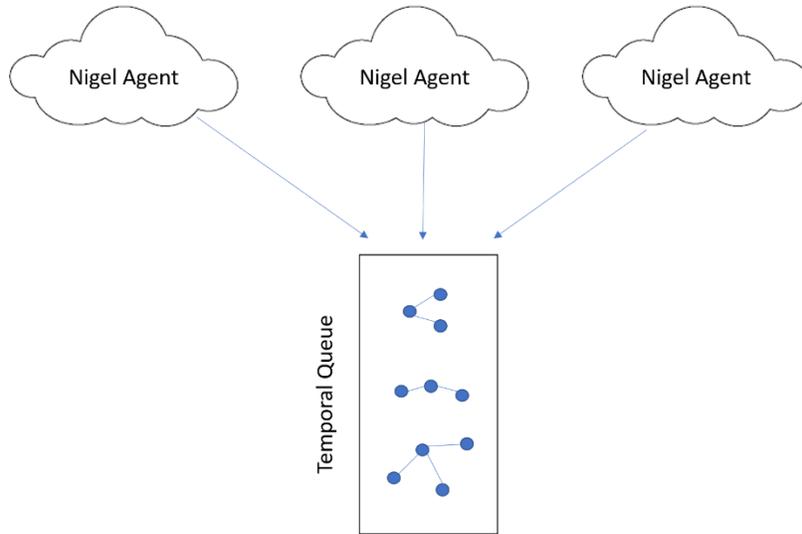
- 1) Use less computational power to learn a single piece of knowledge
- 2) Use the knowledge more dynamically

Please note the example subnets above are highly over-simplified

Machine Learning

Because Kimera views intelligence as the process of changing spacetime, we are interested in the cause and effect of moving particles, not the physical location of each particle. This led us to define knowledge as a cause with one or more effects.

Kimera’s machine learning is designed to learn cause and effect. The centerpiece of the process is the *Agent Independent Temporal Queue*. Multiple disparate agents abstract the raw sensor data from devices into graphs – how much sensor data is abstracted is up to the user. These graphs are then sent to the AGI Node’s machine learning algorithm, starting with the temporal queue.



The machine learning algorithm takes a sensor data graph from the queue and assumes it represents a cause. Next step is to attempt to determine the effect of the observed cause. To do so, the machine learning algorithm reduces the queue using the “locality principle” to only other sensor data that was captured a few meters from and within a couple of minutes after the cause was observed. This is done to reduce the amount of data and resources needed to process it.

Because the machine learning doesn’t know which sensor data represents the effect, it creates a subnet with all the sensor data remaining in the temporal queue. Over time, as the cause is observed, the wrong effects previously encoded will have their confidence reduced while actual effect will gain a higher confidence.

It’s not as simple as a single cause always having a single effect, however. There can be multiple effects. For example,

- 1) Bob arrives at the movie theater to watch a movie. He silences his device. In this first example: Cause = arriving at the movie theater; and effect = silencing phone.
- 2) Alice arrives at the movie theater to work. She turns up her volume. In this second example: Cause = arriving at the movie theater; and effect = increasing the volume.

Kimera’s machine learning uses surrounding sensor data as contextual information and encodes all observed effects into the resulting subnet. That means the subnet for a movie theater has all possible effects superimposed upon it. We call this *Superposition*. Only when there is a user (observer) will this knowledge collapse to the right cause and effect pair (see spacetime).

Spacetime Expansion

When a device or agent needs instructions on how to behave, it requests an “intelligence briefing” from the AGI Node on the network. With this request, the agent includes the current sensor data observations.

From our research, we developed the spacetime expansion (STE) algorithm. Once the STE gets the initial observations, it starts creating a cause/effect focused spacetime module.

Since each observation is a subnet, and each node within the subnet is, in itself, another subnet, the STE keeps unpacking these nodes to create a *macronet* – a large collection of subnets. Based on the user, temporal validity of nodes and confidence levels, the subnets collapse from their superposition to create a subjective spacetime model that can be analyzed for goals and paths to these goals.

Once all the relevant goals have been identified, the STE examines best path for achieving these goals. If paths are found, a hypothesis is created and delivered to all agents involved.

Applied Intelligence

The hypothesis is delivered to the agents. It describes what the AGI Node believes is going on, why it is going on (the goal) and recommendations on what to do. For a device it could mean: “Please call a cab 15 minutes after the user pays the restaurant bill” or “Please silence device 10 minutes after the user walks into a movie theater.”

These hypotheses are then tested. Once they are sent to the agents, the algorithm then looks for the corresponding cause and effect in the machine learning section. If a user does not follow the recommendation, cause and effect will not appear on the temporal queue and it tells the core algorithm that part of the hypothesis was wrong. Or vice versa - if the cause and effect was observed, the positive reinforcement increases the confidence level of the corresponding subnet. Or of the cause was detected, but with a different effect, the corresponding subnet starts changing a little.

An original hypothesis may be sent to multiple agents managing multiple devices. The algorithm then must test its hypothesis by verifying multiple cause-effect observations from multiple devices. We call this *multidimensional reinforcement learning*.

GROWTH AND VALUE PROPOSITION

MARKET OVERVIEW

Companies involved in the AGI space have been extremely successful over the last 18 months; whether or not they are as close to achieving true AGI as Kimera. The impressive roster of exits, capital raises, and ICOs reveals a pattern:

- DeepMind was acquired by Google for ~\$550M, despite generating no revenue
- Vicarious has raised \$134M in venture capital, indicating a valuation in excess of \$500M
- SingularityNET conducted a recent ICO, where they were oversubscribed by offers to invest amounting to \$365M (which was over 10x their cap of \$36M).

Kimera is in the same bracket as these other three, and has every basis from which to generate a similar valuation (and hence similar ICO interest as SingularityNET). The reason AGI commands such a high market value despite all these companies who are currently in the very early stage in terms of recurring revenue, is that most companies are devoted to very narrow applications of AI. Hence there is a high probability they are just stepping stones, rather than the end goal of AGI. Kimera is different.

KIMERA OVERVIEW

Kimera offers a value proposition to several stake holders within the digital ecosystem.

AGI Building Blocks	
People	<ul style="list-style-type: none"> • Intelligent hardware and software continuously learns and automates life • New functionality and services is delivered without the need to manage more complex devices and interactions • Decentralized software agents give users control over how their data is managed and used • Users earn tokens automatically as they generate sensor data through the normal activities they are involved with in their everyday lives
Devices	<ul style="list-style-type: none"> • Manufacturers are financially incentivized to build new types of connected devices, as they receive a share of the on-going value stream their products create • Manufacturers earn revenue as their devices bring value to people
Software Developers	<ul style="list-style-type: none"> • Proactive peer-to-peer networks act as a “reverse app store” model. Rather than users having to go and find apps, the apps are proactively moved to users as needed • Dynamic apps built on the fly by interconnecting microservices, creating abundant opportunities for new types of intelligent software

	<ul style="list-style-type: none"> • Software developers earn tokens every time their apps runs on a consumer device
AGI Nodes	<ul style="list-style-type: none"> • Network owners operating an AGI node get full control over their networks, ability to bias the intelligence and prevent certain services to run on their networks • Node operators manage the revenue share model in their own network

USER & DEVELOPER ACQUISITION

Kimera plans on using a portion of the funds obtained above our soft cap to acquire certain established Android applications with existing users and integrate the AGI middleware directly into them. The goal is to acquire apps with a combined user-base of up to 50 million users.

Acquiring apps is faster and more economical than building our own user base with a custom Kimera app. It allows us to deploy Kimera's AGI at a global scale in under twelve months and reduces the time to integrate with device manufacturers. This will jumpstart the growth of our AGI solution so it begins providing value almost immediately. We are currently focusing on several app categories that provide a natural platform for AGI to add value, including device automation, launchers, alarm clocks, calendaring, messaging, etc.

Similarly, with developers, we intend to acquire one or more developer tools to integrate with our own SDK as an avenue to reach a larger number of developers.

ECOSYSTEM STAKEHOLDER STRATEGIES

Kimera tokens are focused on providing users with an intelligent way to connect with data, functionality and value. Creating ever increasing value for users is core to the expansion of the Kimera token economy.

Kimera understands the importance of token value and plans to increase the value by actively proliferating our AGI through popular mobile applications and incentivizing adoption by paying users for sensor data acquired from simply living their lives. **We will also collect a small fee for the commerce transacted on the system. Commerce will oftentimes necessitate the purchase of Kimera tokens with fiat. This fiat to token exchange will put upward pressure on the Kimera token price due to the reduction of its supply over time.**

For the development community, we intend to provide tools to help software developers create new AGI-powered apps and services offering new and scalable business models. We will also work with service providers to offer compelling ways to use tokens in innovative and automated ways. We intend to provide open source tools and leadership to enable the entire ecosystem to extend and innovate AGI-powered capabilities from devices and networks through apps and content and the cloud.

Attracting Users

Attracting a large user base is key to a vibrant token economy model and requires:

- ✓ Providing a compelling user experience with real benefits
- ✓ Demonstrating marketplace viability to developers for their apps and data
- ✓ Driving innovative, goal-aligned advertising using AGI
- ✓ Proving to device manufacturers there is ROI for participating
- ✓ Ensuring a self-sustaining economy where users and technology come together to exchange value

How End Users Receive Value

Since Kimera's AGI needs sensor data to develop knowledge, Kimera plans *to pay Kimera branded tokens to end-users as payment for installing AGI-enabled apps on their mobile devices that can provide sensor data*. More active usage translates to more sensor data which returns more tokens.

Our goal extends beyond gaining a critical mass of users and sensor data. Our economic model is focused on increasing usage of the token by offering more valuable functionality and data over time. As end users accumulate tokens, incentives will be offered to use the tokens to access new functionality and data accessible via the Kimera token economy. Examples include:

- Using tokens to access premium features within apps/services
- Paying for goods and services with tokens at a discount rather than retail cost using fiat currency
- Exchanging tokens for online services such as hosting, storage, media, etc.

Attracting Developers

Kimera offers developers several key innovations in the way they develop and deliver apps as well as in the way they receive value. Today's app stores favor winner-take-all models where a few apps make money while the vast majority go unnoticed and don't return value to developers. Kimera's value proposition for developers is different in several ways:

- Kimera's token model pays out tokens to the developer based on how much usage their app creates, a radically different model for developers.
- AGI technology allows users and developers to be connected to the apps and data they need
- Expensive marketing campaigns are not needed to raise awareness for the functionality since the AGI automatically delivers it based on an understanding of user intention and need
- App developers can focus on "best of class" functionality for specific microservices since the AGI dynamically assembles applications; eliminating the need for developers to create and support non-differentiating complexity such as UI, authentication, accessibility, translation, etc.
- Kimera's AGI dynamically integrates data from other agents into their apps, offering developers an entirely new model of application innovation

Attracting Device Manufacturers

Kimera intentionally developed technologies and business models that incentivize makers of any product to contribute sensor data to the global AGI, while receiving commensurate compensation in return. The list is endless and scales faster when device makers receive their fair share of the value from the devices they create.

Our initial phase aims at proving an economic model that financially incents devices that produce sensor data. Established connected device manufacturers, such as mobile phones, wearables and connected TVs will adopt this technology first. By proving this economic model, we drive current non-connected manufacturers to explore adding connectivity to their products. This is required for moving towards the next trillion connected devices.

Attracting Network Operators

Kimera's AGI provides a game changing innovation for network operators. Our token economics are inherently decentralized and manifested in a way that allows operators of networks to define how value is exchanged by their users. Operators determine percentage payouts for transactions flowing over their networks and implementation of the current business model. Some may opt for high volume / low percentage models while others may offer premium services offered by unique intelligent agents. Others may offer high security, or high availability.

Kimera is offering AGI-based building blocks that encourage flexible business models and spark innovation and scale.

KIMERA ICO PLAN

Watch our "[Welcome to the ICO](#)" video to learn more about our investment philosophy.



INTRODUCTION

Kimera intends to establish the “gold-standard” for ICOs. There currently is a lack of regulatory oversight regarding ICOs. As a result, Kimera is working closely with our team of legal, accounting and investment banking experts to interpret and remain in compliance with the existing laws. Current interpretation states that, while we are building an exciting utility for the tokens, these tokens are considered securities.

For the **Private Pre-Sale**, only accredited investors in the US who qualify under Rule 506(c) of Regulation D and foreign (non-US) investors under Regulation S of the Securities Act of 1933 could participate in this initial offering. In this phase all investments were done under Simple Agreement for Future Tokens (SAFT).

For **pre-sale**, only foreign (non-US) investors can participate under Regulation S. US investors cannot participate in this initial sale of tokens as a result of a lock-up period.

For the **Public ICO**, both non-accredited and accredited US residents can participate for up to USD 50 million under Regulation A+. SAFT holders will be able to convert their SAFT into tokens at this time. Foreign investors may continue to purchase tokens during this public ICO under Regulation S.

Part of our “gold-standard” approach is to make our ICO, and post ICO, as transparent as possible:

- Our documentary will continue for at least one-year post ICO. It will reveal a behind-the-scenes look at what the company is doing, its successes and failures and provide general insight into the company operations.
- Two board seats represent all token holders. Token holders may nominate candidates for the board and vote in elections. The company does reserve the right to perform full background checks on every board member, regardless of who they represent. The Company reserves the right to refuse to seat an individual who is considered high-risk. If this happens, the next candidate, with the most votes who passes a background check, will be seated.
- Annual financials will be made public.

While we hope the United States Congress introduces practical ICO regulations, we will do our best to conduct ourselves honestly and transparently, provide investor protections and make the KIMERA token attractive, now and in the future.

KEY FACTS ABOUT THE KIMERA ICO PLAN

KIMERA token symbol	KIMERA	
Token standard	ERC20 (Ethereum)	
Tokens issued	2,000,000,000	KIMERA
Tokens available for ICO	1,000,000,000	KIMERA
Private Sale (SOLD OUT)	7,900,000	KIMERA
Promotional Pre-Sale	25,000,000	KIMERA
Pre-Sale (100% Bonus)	500,000,000	KIMERA
Public Sale	467,100,000	KIMERA
The KIMERA ICO starts	June 2018	

KIMERA Token Privileges

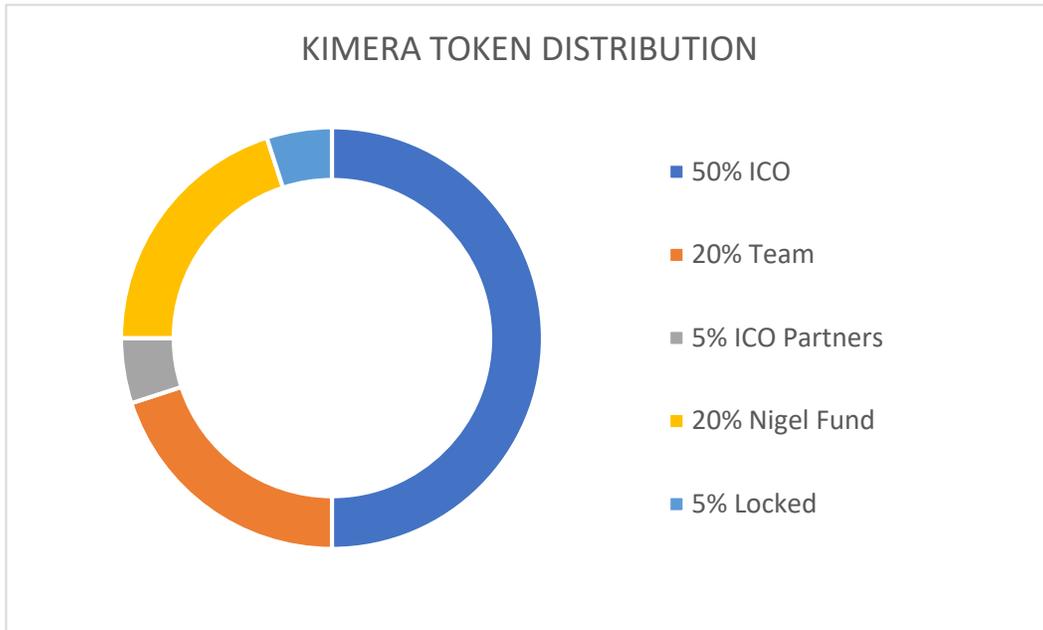
Kimera token holders will be eligible for two unique privileges:

- 1) Kimera's Board of Directors will be expanded by two seats representing tokens holders. Any token holder will be eligible to nominate and vote on candidates. The new board composition will be:
 - a. Executive Management, 2 seats
 - b. Equity Shareholders, 2 seats (Only shareholders can nominate and vote)
 - c. Token Holders, 2 seats (Only token holders can nominate and vote)
 - d. Independent seat, 1 seat (Nominated and voted on by the board)

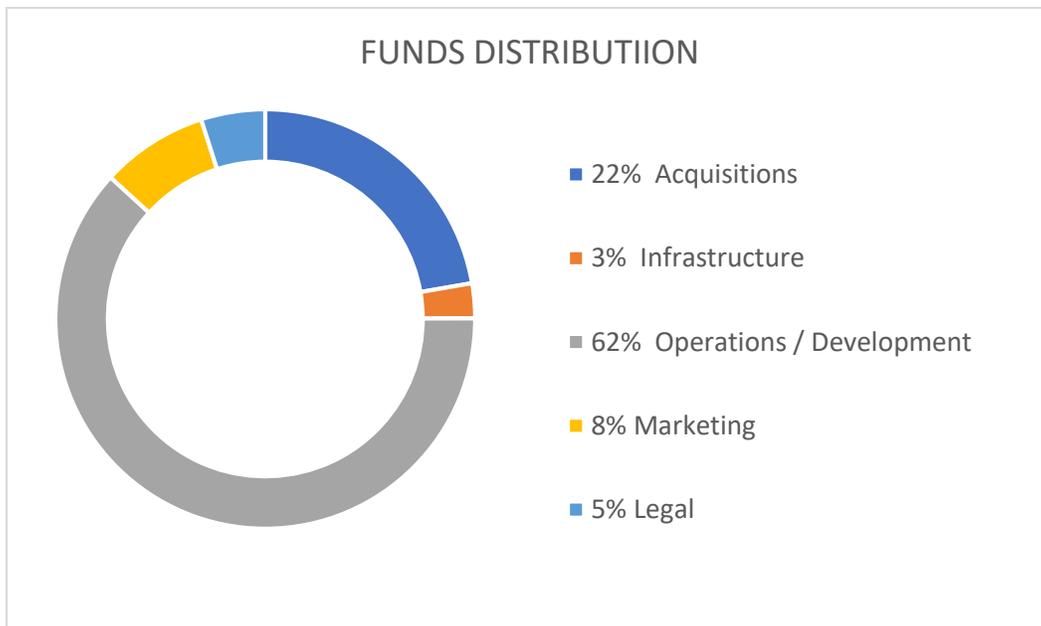
This structure gives token holders a voice on the Board.

- 2) Tokens are backed by Kimera intellectual property (IP) in the form of a springing trust. AGI is expected to be the most valuable technology ever created by mankind. As Nigel AGI matures and becomes "smarter," we expect the value of the IP to grow substantially and put upward pressure on the token value.

ICO FUNDS USAGE



All funds received from the ICO will be used for to bring Nigel AGI to market and mature the token economy. Specifically:



THE KIMERA ROADMAP

Quarter	Completed Milestone
2005	Start of research – Artificial General Intelligence and Future Economics
2007	Early non-AGI incarnation brought to market under “GoLife Mobile”
2010	First prototype of AGI functional
2012	AGI technology more mature. Kimera Systems, Inc. incorporated in Oregon, USA
2015	Telecom Council of Silicon Valley nominates Kimera as the most disruptive startup
Q2 2016	Seed funding closed (~\$500K)
Q3 2016	1 st Beta test conducted: ~20 people in Portland, OR.
Q2 2017	2 nd Beta Test conducted: 1,000 people worldwide. First “transfer learning” detected
Q4 2017	ICO plans adopted by Board of Directors
Q1 2018	Private pre-sale oversubscribed
Q1 2018	Rochester Institute of Technology announces they will take in Nigel AGI for research

Kimera intends to aggressively execute on our business strategy to bring maximum value to token holders.

The 24-month roadmap:

Quarter	Milestone
Q3 2018	First app and SDK acquisitions
Q4 2018	First app integration complete
1H 2019	Agent Open Source Code available
2H 2019	AGI Node available
2H 2019	Revenue target: \$3 million annualized
1H 2020	1,000 AGI Nodes globally
2H 2020	First device manufacturer partnership
2H 2020	Revenue target: \$10 million annualized

KIMERA VIDEOS

Kimera has produced a series of short, informative videos which provide additional information. We will create new videos as we further develop our technology. To follow Kimera's journey, please subscribe to the [Kimera YouTube Channel](#). To follow Kimera's ICO journey check out the [Kimera ICO Documentary Series](#) produced and directed by [Tribe Media House](#).

CURRENT VIDEOS

[The Kimera Vision: Moving Humanity Forward](#)



[ICO Introduction](#)



[Kimera Video Whitepaper](#)



[Artificial General Intelligence \(AGI\) Introduction](#)



[Technology Part 1 – What is Intelligence - Kimera's Theory of Intelligence?](#)



[Technology Part 2 - Machine Learning](#)



[Technology Part 3 - Application of Knowledge](#)



[KIMERA Token Economics](#)



[Value Creation](#)



[The Kimera ICO Journey](#)



KIMERA IN THE NEWS

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YouTube	Kimera Systems Channel	Welcome the Channel, where we discuss topics related to Artificial General Intelligence
Telegram	http://t.me/kimeraAGI	ICO Updates and support
Facebook	facebook.com/kimerasystems/	Company updates
Instagram	#kimerasystems	Occasional updates

THE KIMERA TEAM



Chief Executive Officer, Mounir Shita

Mounir “Mo” Shita is an entrepreneur with over two decades of experience, who is changing the world. He founded Kimera Systems to revolutionize the way technology and humans interact by bringing artificial general intelligence (AGI) to the world. Mounir envisions a future where technology proactively helps people achieve their goals.

Mounir’s AI experience led him to develop a single-algorithm AGI that learns the way humans do, giving connected devices common sense as learned through observing how humans behave in real-life. Kimera calls this technology “Nigel,” after its co-creator Nigel Deighton, who passed away in 2013.



Chief Operating Officer, James Whitley

James “Jamie” Whitley is a multi-disciplined executive with over two decades of expertise in business and technical operations. He is a practical and results-driven leader with a panache for building successful organizations from the ground up or turning around underperforming ones while positioning them for long-term success. Most recently, Jamie has been the SVP of Technical Operations at a Fortune 500 company in the financial services sector.



Chief Sales Officer, Nicholas Gilman

Nicholas Gilman is a seasoned serial entrepreneur with over two decades of international sales and business development experience. He is passionate about technology and conducting business on a global scale, having worked in over 50 countries and territories. Most recently, Nick founded PointedRocket, a B2B technology consulting company where he was a senior consultant.



Head of Product, Carl Johnson

Carl Johnson is a product manager with over two decades of experience. He is a passionate individual who oversees new platforms and business development for virtual, augmented and mixed reality. Most recently, Carl was at a Fortune 100 semiconductor firm where he was a product marketing manager.



Head of Engineering, Stephen Hall

Stephan Hall is a software developer with over two decades of experience who has been programming AI's since age 20. Stephen is a highly innovated developer and passionate about how to make machines think. Most recently, Stephen was the founder and Chief Technology Officer of web and app development consultancy at BG Studios.



Head of International Relations, Gabriele Viebach

Gabriele Viebach is a strategic advisor with a track record for helping technology companies enter new markets. She is a lateral thinker and maker who leads international expansion. Most recently, Gabriele was a management consultant offering strategic advice to IT and telecom companies, helping them adjust to dynamic, changing markets.



VP of Business Development, Miika Mantyvaara

Miika Mantyvaara is a seasoned business development executive with many years of experience. His passion lies in building and evangelizing technical solutions. Most recently, Miika was the Director of New Business Development at a Fortune 100 semiconductor firm.



Senior Software Engineer, Simen Burud

Simen Burud is a very sharp software developer who has been coding since high school. He's passionate about developing Android apps which delight hundreds of thousands of users. Most recently, Simen is finishing his degree at the Norwegian University of Science and Technology and looks forward to joining Kimera full-time.



Senior Database Engineer, Will Mayal

Will Mayall is a database administrator with multiple decades of experience. He enjoys learning many database languages where he focuses on performance tuning and support. Most recently Will has been the Senior MySQL DBA at a leading mobile attribution and analytics platform company.

Senior Software Engineer, Frank Torres

Frank Torres is a systems consultant with UNIX/Linux Craftsman experience over multiple decades. He enjoys applying his knowledge to bring the best of breed technology to solve technical problems. Most recently, Frank has been a systems consultant.



Head of Marketing, Adam Peer

Adam Peer is a marketing research analyst with over 6 years in direct marketing experience. He is a passionate and driven individual who develops strategic solutions to address society's needs. Most recently, Adam has been a market research analyst in the electronic design automation and embedded software industry.



Head of Staff & Science, Morgan Ferguson, PhD

Morgan Ferguson is a multi-disciplined program manager with over a decade of expertise in technical and academic fields. She is a logical leader who brings teams together to not only deliver, but excel. Most recently, Morgan has been the program manager across multiple business units at a Fortune 500 company in the financial services sector.



ICO Advisor & Stanford University Lecturer, Kartik Gada

Kartik Gada is an investment banker in the technology sector, with an emphasis on emerging, disruptive technologies such as Artificial Intelligence, 3D Printing, and FinTech.



Marketing Consultant, CEO of Tribe Media, Faris Mubarak

Faris Mubarak is a marketing consultant with a decade of experience. He is a driven individual who thrives on developing holistic strategies to encompass all aspects of digital marketing. Faris is the CEO of Tribe Media, who is closely partnered with Kimera Systems.



Marketing Consultant & CD of Tribe Media, Zikria Haqiqi

Zikria “Zak” Haqiqi is a marketing consultant with over a decade of experience in digital & print design and video production. He is a creative thinker who focuses on minimalism & communication, not decoration. Zikria is the Creative Director of Tribe Media, who is closely partnered with Kimera Systems.
