

Robocentric

The transhumanistic American high-tech corporation that advances the science, technology, and capitalism of artificial intelligence, robotics, human immortality biotech, human genetic screening and engineering biotech, neurotech, nanotech, bionic biotech, and interplanetary, interstellar, and intergalactic mass-scale outer space humanity expansion tech

This document contains the description of a science and technology research project performed at Robocentric, by Allen Young, Robocentric Chief Science and Technology Researcher, the transhumanistic Asian-American man, for advancing transhumanism.

Transhumanism is removing the human intelligence limit, removing the human manual labor limit, removing the human lifespan limit, and removing the human limit in being confined to Earth. Transhumanism is advancing artificial intelligence, robotics, biotech, nanotech, neurotech, and outer-space tech to the uttermost extremes—for enabling humans to have access to limitless human or humanlike intelligence, limitless human or humanlike manual labor, limitless human lifespan, and limitless human presence in the Universe.

Human-Robot Interactions and Integration Modeling for Enabling Ubiquitous and Pervasive Robotics

A Robocentric science and technology research project description

By Allen Young

Robocentric CEO

Robocentric Chief Science and Technology Researcher

Robocentric Chief Technology Architect

Contact info at Robocentric.com/Contact

Biosketch and autobiography at Robocentric.com/Bio

The transhumanistic Asian-American man who publicly promotes and advances the science, technology, and capitalism of artificial intelligence, robotics, human immortality biotech, neurotech, nanotech, and mass-scale outer space humanity expansion tech

A workaholic who works over 80 hours almost every week

A never-married and childless college dropout

From multiple generations of failed bloodlines

Born in AD 1979

Robocentric plan to transhumanize America and the rest of the First World at

Robocentric.com/Future and Robocentric.com/Plan

Robocentric science and technology research projects at Robocentric.com/Projects

Robocentric.com

Copyright AD 2022 by Robocentric. All rights reserved.

Copyright

Copyright © 2022 by Robocentric™. All rights reserved.

The copyright holder of this document explicitly grants the right to freely distribute this document, without modification, only for the purpose of assessing funding Robocentric for advancing artificial intelligence, robotics, human body biotech, and mass-scale outer space tech.

You may not commercially distribute this document for your own financial gain, without the copyright holder's explicit consent, permission, and agreement.

Disclaimer

All information herein is presented for informational purposes only and offered "as is" without contract, warranty, guarantee or assurance of any kind. No responsibility or liability of any kind is assumed by the Author and the Publisher for any consequence that arises from the use of the information herein.

Transhumanize and posthumanize humankind—through advancing the science, technology, and capitalism of artificial intelligence, robotics, human immortality biotech, human genetic screening and engineering biotech, nanotechnology, neurotechnology, bionic biotech, and interplanetary, interstellar, and intergalactic mass-scale outer space humanity expansion tech.

—The Robocentric mission

Project Summary

Overview

This project is for Allen Young, the principal investigator of this project, to develop, textually specify, and publish an integrated or unified scientific theory that **links and integrates human intention, perception, and motor actions with machine motor actions and human awareness**—for making the daily human lives completely dependent on high-mobility and high-dexterity embodied artificial intelligence and robots, for making humans and high-mobility and high-dexterity machines inseparable, in the next generation of the First World society and economy.

Intellectual Merit

This project provides a scientific model for embodied artificial intelligence related human intent, perception, and behavior—for creating the human intent, perception, and behavior that are inseparable from high-mobility and high-dexterity embodied artificial intelligence and robots.

This project provides a scientific model for embodied artificial intelligence motor responses triggered human intent, perception, and behavior modification, improvement and evolution—for creating the high-mobility and high-dexterity embodied artificial intelligence and robots that are aware of human intent, perception, and behavior, and are integral to daily human lives in the First World.

This project provides a scientific model for developing embodied AI and robotics technologies that are aware of, and able to auto-adjust to, human intentions, perceptions, and behaviors.

This project provides one or more strategies for productizing and commercializing the mind, machine and motor nexus theory developed in this project for making embodied AI and robotics ubiquitous in America and elsewhere in the First World.

Broader Impacts

During development and upon completion, this project will provide a body of knowledge that is essential in making humanlike artificial intelligence and robots ubiquitous and pervasive in America—for expanding the American national economy by robotizing the American national economy and increasing the American human worker productivity via humanlike artificial intelligence and robots.

This project makes essential contributions to enabling adding 300 million or more humanlike robot workers to the American national economy on Earth and in outer space, that are managed by the American human workers, for increasing the Earth and outer-space American national annual GDP to US\$50 trillion and beyond, over US\$25 trillion more than the pre-robotization level.

This project makes essential contributions to making cheap mental and manual labor abundant and limitless in America, on Earth and in outer space, through creating a body of necessary knowledge in ubiquitous and pervasive artificial intelligence and robotics that enable humanlike artificial intelligence and robots to be used everywhere in America in all human endeavors.

Intellectual Merit

Work to Be Undertaken, Objectives and Expected Significance

"Mankind is something to be surpassed."

— Friedrich Wilhelm Nietzsche, in *Thus Spake Zarathustra*, Part I, 3.

This project is for performing a **fundamental and applied research in mind, machine and motor nexus with particular applications in making artificial intelligence and robotics ubiquitous in America** and elsewhere in the First World, and doubling the American annual national GDP to US\$50 trillion and beyond via robotizing the American national economy.

Allen Young, the principal investigator of this project, is a transhumanistic Asian-American man who publicly promotes and advances the science, technology, and capitalism of artificial intelligence, robotics, human immortality biotech, human genetic screening and engineering, nanotech, neurotech, bionic biotech, and interplanetary, interstellar, and intergalactic mass-scale outer space humanity expansion tech.

Allen Young advances transhumanism according to his America and First World transhumanization plan that he has envisioned, documented and published in his book, *The Future: How artificial intelligence, robotics, human body biotech, and mass-scale outer space tech will alter the human reality*.

Successfully completing this project as an essential part of accomplishing Allen Young's paramount mission of transhumanizing America and the rest of the First World.

This project is for Allen Young to develop, document, and publish one or more theoretical and applicable models that depict the **intersections and interactions of human intent, perception, and behavior with high-mobility and high-dexterity robots**, especially when high-dexterity robots become ubiquitous in America and elsewhere in the First World—and answer **how humans and high-mobility, high-dexterity robots should and will interact with each other**, especially when such robots become ubiquitous in America and elsewhere in the First World, and can be extensions of human intent, perception, behavior, and motor functions.

This project aims to **answer how human intent, perception, behavior, and motor functions, and robot responses and motor functions should and will mesh into a cohesive whole to build an integrated socioeconomic system in America** and elsewhere in the First World, in which humans express their intentions, modify their perceptions of what's possible and what should be done, and extend their motor actions through high-mobility, high-dexterity robots that are ubiquitous and can perform manual tasks that only humans could.

The ultimate objective of this project is producing and publishing a book or book-series final project work product, tentatively titled "Human-Robot Interactions and Integration Modeling for Enabling Ubiquitous and Pervasive Robotics", that contains all the project results.

The one or more **mind, machine, and motor nexus paradigms and technology development strategies** developed, documented, and published in this project will be implemented in one or

more subsequent projects by Allen Young and his transhumanistic American high-tech corporation Robocentric for **making artificial intelligence and robotics ubiquitous and pervasive in America** and elsewhere in the First World, and increasing the American national annual GDP to US\$50 and beyond by robotizing the American national economy and adding 300 million or more robot workers to the American national economy on Earth that are managed by the American human workers.

Allen Young aims to achieve the following objectives in this project.

1. **Embodied artificial intelligence related human intent, perception, and behavior modeling**

- 1.1. Textually model and publish the causes of the human motor actions. Identify, textually specify, and publish the human behavior patterns and psychological vectors (recurring psychosocial issues that stimulates growth and development in the personality) in the social, economic, sexual, political, competitive, collaborative, creative, and procreative human behavior dimensions, that are applicable to the motor interactions between humans and embodied artificial intelligence systems. Elaborate on why they are applicable.
- 1.2. Develop, textually specify, and publish one or more models of humans using one or more robots to achieve their human ends in creating physical motions, that especially deal with the complications in collaborative robotics that involve using hundreds, thousands, or even millions or more robots to achieve human ends in creating physical motions and movements, in different human interest packets on Earth and in outer space. Model humanity as different packets of interest groups such as different economic sectors, industries, businesses, and military branches, that can and will use embodied and intelligent machines to achieve human ends in those human interest packets by creating the desired physical motions and movements via embodied and intelligent machines. Develop, textually specify, and publish one or more models that depict how different human interest packets and groups can and will expand via using embodied and intelligent machines with motor capabilities. Develop, textually specify, and publish the American and other First World interest packets and groups, and how the human mind and motor action diversification and expansion will happen in America and elsewhere in the First World due to the embodied and intelligent machines with high-mobility and high-dexterity motor capabilities.
- 1.3. Textually specify and publish the forthcoming applications of the intersection of mind, machine and motor in the areas that require intense human manual labor that can be replaced or augmented by high-mobility, high-dexterity robots such as mining, manufacturing, construction, manual-labor intensive services, housework, family care, elder care, and childrearing.

2. **Embodied artificial intelligence motor responses triggered human intent, perception, and behavior modification, improvement and evolution modeling**

- 2.1. Textually specify and publish how human intent, perception, and behavior will differ in different levels and scales of using and interacting with embodied and intelligent engineered systems with motor functions, such as in individual robotics, single-team robotics, multiple-team robotics across a wide geographical area with different teams performing different tasks and achieving different objectives, and ubiquitous robotics in

which humans have and use robotics everywhere in America and elsewhere in the First World.

- 2.2. Answer in writing the questions, 'When embodied and intelligent engineered systems advance sufficiently enough to completely supplant the human manual labor, and human manual labor becomes no longer required because highly advanced humanlike artificial intelligence and robots can perform all the manual tasks that only humans could, what should and will humans do? What should and will happen when the motor systems of embodied and intelligent engineered systems surpass and supplant the human motor system? How will the human cognition, behavior, and perceptions evolve when they no longer have to perform manual labor because robots can perform all the manual tasks that they can perform? When high-mobility, high-dexterity robots perform manual tasks side-by-side with humans, what kinds of considerations should such robots have on humans to protect and benefit humans?'; publish the questions and answers.
- 2.3. Answer in writing the questions, "When hundreds of a million embodied and intelligent machines (particularly humanlike robots with locomotion and object-manipulation capabilities) are manufactured and sold in America and elsewhere in the First World, how will humans use those intelligent machines to extend their motor and object-manipulation capabilities? How will the physical actions that embodied and intelligent machines with motion capabilities perform will affect and change human mind and motor actions? How will humans think and behave when intelligent machines with motion capabilities become ubiquitous in America and elsewhere in the First World?"; publish the questions and answers.
- 2.4. Develop, textually specify, and publish one or more models of a socioeconomic system in America and elsewhere in the First World that completely integrates human intent, perception, and behavior in motor manipulation, and high-mobility, high-dexterity embodied and intelligent engineered systems and their responses to humans.
- 2.5. Develop, textually specify, and publish the human intent, perception, and behavior modification, improvement and evolution triggered by mass-scale outer space robotics in outer-space farming, mining, manufacturing, construction, and labor-intensive services.
- 2.6. Consider, specify in writing, and publish physical human interactions and relationships with high-mobility and high-dexterity humanoid and non-humanoid robots (such as robot pet dogs) in economic, social, and sexual dimensions. E.g. answer in writing the question, "Will humans eventually have ultra-humanlike robots as their sexual partners, as their sole sexual partners, or in addition to having one or more human sexual partners?"; answer the question in a manner that addresses the human biological sexual and procreative desires; publish both the question and answer. Consider, textually specify, and publish the issues in humans having personal feelings and attachments, and understanding as a relationship, toward their embodied and intelligent machines with high-mobility and high-dexterity capabilities; especially explore the issue of embodied and intelligent engineered systems playing the roles of parents, friends, and sexual partners via their speech and motion motor capabilities.
- 2.7. In an economic downturn, such as a recession or depression, the poor and economically underprivileged people suffer the most and lose their jobs first. Textually model and publish how widely available and used embedded AI and robotics technologies will affect economic downturns and the economic states of poor and economically underprivileged people.

- 2.8. Consider, textually specify, and publish the potential and evolving human expectations of what physical or motor actions humanoid and non-humanoid robots should perform for them. Explore deep into the human psychological mechanisms in planning and performing their motor actions, go much beyond humans simply commanding robots to perform simple motor actions, and textually model and publish the evolving human psychological expectations of what embodied artificial intelligence must be able to do for them with ever-increasing human psychological complexity and depth.
- 2.9. Consider, textually specify, and publish how having embodied and intelligent machines with high-mobility and high-dexterity capabilities as work tools that can be intelligently managed can and will give one or more new types of meaning and purpose to the human workers.

3. Applications in embodied AI and robotics technologies development

- 3.1. Develop, textually document, and publish one or more machine-human motion relationship theories that look at human motor actions as human attempts to accomplish human goals, and look at physical robots with locomotion and object-manipulation capabilities as extensions of human motor actions for accomplishing human goals. Identify, textually specify, and publish what must be implemented in embodied AI and robots, both in motor and computational capabilities, for extending and expanding human goal achieving via using robot motions—across all of the social, economic, sexual, political, competitive, collaborative, creative, and procreative human behavior dimensions—on Earth and in outer space. Identify, textually specify, and publish the human behavioral patterns in social, economic, sexual, political, competitive, collaborative, creative, and procreative dimensions, and extending human behaviors via embodied AI computations and robot motions. E.g. answer in writing the question, "What should embodied AI and robots be able to do, and actually do, knowing what humans are and what humans do?", and publish the question and answer, for the applications in developing and commercializing embodied AI and robotics technologies with the primary emphasis on robot actuation or motor actions.
- 3.2. Develop, textually specify, and publish one or more paradigms for translating human motion desires or intents to high-mobility and high-dexterity robot motions, human commands to robot motor executions or movements. That is, develop, textually specify, and publish one or more computable theories that can physically manifest by being implemented on computers and robot hardware, especially by handling vision-motor-tactile-sensor coordination in robots.
- 3.3. Develop, textually document, and publish one or more methodologies for designing the human activities (such as human jobs) within the context of having and using embodied and intelligent machines with high-mobility and high-dexterity motor capabilities, for socioeconomically benefiting humans using ubiquitous embodied and intelligent machines with high-mobility and high-dexterity motor capabilities. Textually specify and publish the different human uses of high-mobility and high-dexterity embodied and intelligent machines to perform physical tasks and alter a physical environment via or through using such machines.
- 3.4. Textually specify and publish how and why high-mobility, high-dexterity robots (i.e. embodied and intelligent engineered systems) should respond to human commands, in ways that consider and factor in human safety and productivity.

4. **Project results productization and commercialization strategy development, textual documentation, and publication** for starting—during and/or immediately after completing this project—rapid commercialization of the technologies addressed by this project. Develop, textually specify, and publish one or more strategies for productizing and commercializing the scientific and technological results of this project for building improved U.S. economy and military with the integration of human intent, human perception, human motor actions, and robot motor actions, that aid and support entrepreneurs, managers, and rank-and-file human workers to create greater and more diverse human economies and human experiences on Earth and in outer space, and also aid the U.S. military personnel to increase the U.S. national defense and offence capabilities on Earth and in outer space. Design, textually specify, and publish one or more paradigms of an economy with integrated human and robot workers that humanlike artificial intelligence and robot products, one or more right commercialization strategies, and applicable or suitable economic policies and campaigns can create to create much more diverse and brand-new human experiences. Design, textually specify, and publish one or more paradigms of the U.S. military with a human soldiers and motor-action-capable robots integration that aid and support the U.S. military personnel to increase the U.S. national defense and offence capabilities.

The successful completion of this project is absolutely required in building a society and economy with total and complete human and robot integration in America and elsewhere in the First World for doubling the American national annual GDP to US\$50 trillion and beyond by adding 300 million or more AI and robot workers to the American national economy; as such, the **expected significance** of completing this project is making an absolutely essential contribution to **making artificial intelligence and robots with humanlike intelligence and motor capabilities ubiquitous in America and elsewhere in the First World, and doubling the American national annual GDP to US\$50 trillion and beyond on Earth by robotizing the American national economy on Earth.**

Relationship to Other Works

This project uniquely integrates human intention, perception, and motor actions with embodied artificial intelligence and robotics, for making AI and robots ubiquitous in America and elsewhere in the First World. This project answers the question, 'How and why will AI and robotics be an essential part of extending and evolving human intention, perception, and motor actions?'

All the work Allen Young does, including this project, is for achieving Allen Young's publicly stated goal of transhumanizing the human species according to his plan specified in his book, *The Future: How artificial intelligence, robotics, human body biotech, and mass-scale outer space tech will alter the human reality.*

Transhumanism is removing the human intelligence limit, removing the human manual labor limit, removing the human lifespan limit, and removing the human limit in being confined to Earth. Transhumanism is advancing artificial intelligence, robotics, biotech, nanotech, neurotech, and outer-space tech—for enabling humans to have access to limitless human or humanlike intelligence, limitless human or humanlike manual labor, limitless human lifespan, and limitless human presence in the Universe.

This project, along with Allen Young's other artificial intelligence and robotics projects, contributes to achieving Allen Young's publicly stated goal of making artificial intelligence and robots ubiquitous in America, and doubling the American annual GDP to US\$50 trillion, US\$25 trillion more than the pre-robotization level, by adding 300 million or more robot workers to the American national economy, that are managed by human workers.

In particular, this project relates to completely integrating human intention, perception, motor actions with high-mobility and high-dexterity embedded AI and robots, to **making human activities, especially human motor actions, inseparable from embedded AI and robots.**

Allen Young's major goal in AI and robotics is to develop and market the artificial intelligence (AI) and robotics technologies that he envisions, that will have highly advanced vision-motor coordination, robot motion planning and execution, and dexterity, that will be able to perform enormously complex and sophisticated manual tasks that only humans have been able to perform so far. Allen Young aims to complete and commercialize the novel robot vision technology that he has been working on, for enabling revolutionary visual recognition and reasoning capabilities in artificial intelligence systems and robot hardware units. Allen Young aims to develop and commercialize the novel robot hardware design and manufacturing software and hardware technologies that he envisions and pursues, that will nano-technologically assemble artificial monomers and polymers for robot bones, muscles, ligaments, tendons, nerves, fuel circulation channels, skins, and sensors. Allen Young aims to develop and commercialize the novel robot-control and task-management technologies that he envisions and pursues, that will enable robots to be versatile and practically limitless in performing a wide variety of manual tasks. Allen Young aims to enlarge and double the First World national economies via exponentially increasing the use of robots in the First World.

This project is a part of Allen Young's effort to develop and commercialize his novel robot-control and task-management technologies.

How Human Beings Perform Manual Labor

One aspect of the human body is that it is a physical motion hardware device with integrated visual information sensing, visual data processing, motion planning, motion execution, trial, error, learning, correction, and improvement. In particular, the human eyes and brain enable visual information sensing and processing in the human being, whereas the human-body bones, joints, tendons, ligaments, muscle fibers, muscle bundles, muscle groups, nerves, and energy supply system enable human-body motor motions.

Allen Young, the principal investigator of this project, suspects that the following major components are involved in how human beings perform manual labor; Allen Young's conclusion is that in order for a robot to be able to perform the manual tasks that could only be performed by human beings, the robot must have all the following faculties or human-like manual labor hardware and software components.

The first stage in planning and performing human manual labor is visual information sensing. The human eye collects streams of light in the way a camera does, and forms an image on the human retina in the back of the human eye. The human retina is a thin layer of tissue composed

of photoreceptor cells, which translate the incoming light into impulses that are transmitted to the human brain for processing via the optic nerve attached to the human retina. Technologically, visual perception is already a solved problem; nowadays, in AD 2022, cheap high-resolution computer cameras are manufactured and sold in massive quantities.

The second stage in planning and performing human manual labor is visual data processing for segmenting, categorizing, storing, and recognizing different visual components and patterns. Currently, this is an unsolved technological problem. To the best of Allen Young's knowledge, there is no completed technology that can precisely segment, categorize, store, and recognize different visual components and patterns in an image that can be used in planning and executing ultra-precise visual data based motion planning and execution; Allen Young aims to develop and commercialize this vision technology.

The third major stage in planning and performing human manual labor is motion planning, with human muscle groups movement planning.

The fourth major stage in planning and performing human manual labor is motion execution, with motion trial, error, visual and tactile feedback analysis, learning, correction, and improvement.

This project aims to provide a detailed model on why human beings plan and execute motor actions, that will be used in developing and commercializing a set of embodied artificial intelligence and robotics technologies that replicate the human motor-action planning and execution behavior, and are responsive to human intentions, perceptions, and motor actions.

AI and Robotics Problems to Solve, and Objectives

The core requirement that Allen Young sees in creating the artificial intelligence and robotics technologies with human-like visual and dexterity capability is replicating in machines the human visual information processing capability, and the human motor (or muscle) control capability with the human vision-motor coordination capability that performs visual motion planning, and visual motion performance guidance and correction.

One key requirement Allen Young sees is developing a set of software, hardware, or both technologies that perform robot eye or visual-sensor input processing for visual robot-motion planning and execution.

Another requirement Allen Young sees is developing a set of software, hardware, or both technologies for robot work specification and management.

Another requirement Allen Young sees is developing a set of software, hardware, or both technologies for robot work execution control.

Another requirement Allen Young sees is developing a set of software and hardware technologies for designing and manufacturing robot bones, joints, tendons, ligaments, muscle fibers, muscle bundles, muscle groups, nerves, skins, sensors, and energy supply system, and the whole robot bodies.

In order to create the AI and robotics technologies with high-precision, human-like visual data processing and dexterity for performing the manual tasks that only humans could, Allen Young will develop the following major technology components, and integrate them to create a complete robot software and hardware system that can perform extremely complex manual tasks. Allen Young will develop and commercialize **general-purpose robot hardware units** that can perform virtually unlimited numbers and types of manual tasks without physically changing the robot hardware.

Allen Young will build a highly advanced visual data processing, recognition, and application technology system, with the capability to precisely recognize and localize visual patterns in visual data.

Allen Young will build a robot vision-motor coordination (with motion planning and planned-motion execution control) technology system with built-in human safety measures.

Allen Young will build a set of high-dexterity robot hardware design and manufacturing technology systems with nano-technological robot hardware design and assembly capabilities.

Allen Young will build a set of robot task management and control technology systems.

While Allen Young develops the core robotics technologies that he envisions, he will also focus on the activities that humans will perform using the versatile and high-dexterity robots, in order to commercialize the robotics technologies that he develops.

This project pertains to developing and commercializing robot work specification and management technologies that are aware of human intentions, perceptions, and motor-action behaviors, and also to designing the human activities that involve high-mobility and high-dexterity embodied AI and robots.

General Plan of Work

The ultimate objective of this project is producing and publishing one or more books that contain all the project results with all the answers, relevant information, paradigms, models, process specifications, and further research and development (R&D) plans, that achieve all the project objectives. As such, the entire project focus is on producing and publishing the final work-product book(s); all the work in this project is centered on achieving this ultimate project objective.

Allen Young, the principal investigator (PI) of this project, will perform this project according to the following process.

1. Create in writing the outline(s) of the book(s), while considering all the factors, concerns, and questions to be answered in this project. Do whatever needed background research online while writing out the book outline(s), taking notes of all the necessary third-party information and its sources, and of all Allen Young, the principal investigator's own ideas.

2. Develop all the necessary concepts and models, design and perform all the required thought experiments, and answer all the questions, all in writing, as the book contents that achieve all the project objectives and provides the expected significance. Also, regularly produce and publish online audiovisuals, using the completed or in-progress book contents, to inform and share with the public the project progress.
3. Review and complete all the book contents.
4. Publish the book(s).

Success Criterion and Benefits

Allen Young, the principal investigator of this project, does not know exactly what results will have been produced at the conclusion of this project, since this is a research project that will produce **never-before-existed knowledge**; but he is confident that he will manage to achieve all the project objectives.

Allen Young, the principal investigator of this project, will determine this project to be a success when all the textually specified objectives earlier are accomplished to Allen Young's satisfaction.

When this project gets successfully completed, it will yield the **benefit** of having textually specified human and robot integration paradigms and technology development strategies published in one or more books, that will be used in building a society and economy in which humans and robots are inseparable, and making embodied artificial intelligence and robots ubiquitous in America and elsewhere in the First World for increasing the American national annual GDP to US\$50 trillion and beyond.

Broader Impacts

Broad Economic Impact

This project is a necessary component in universalizing artificial intelligence and robots in America and the rest of the First World—making artificial intelligence and robots essential to the human existence and daily lives—with the particular application in doubling the American annual GDP to US\$50 trillion, by making artificial intelligence and robots ubiquitous in the American national economy.

This project contributes to creating unlimited supplies of cheap mental and manual labor via humanlike artificial intelligence and robots in America, and robotizing mining, manufacturing, and construction in America, on Earth and in outer space.

One major economic consequence Allen Young, the principal investigator of this project, aims to create through advancing AI and robotics is having 100 to 200 million robots working in the American factories on Earth, managed by human robot-managers.

Allen Young expects America to have as many working robots as twice the number of the American human workers, 320 million or more, to increase the American annual GDP to US\$50 trillion and beyond.

Allen Young expects that in the robotized American national economy, the American human workers will manage exceedingly capable artificial intelligence and robots to at least double the total American national economic outputs from the pre-robotization level.

This project contributes to creating the robotized American national economy, by providing a conceptual framework for integrating human intention, perception, and motor actions with embodied artificial intelligence and robots, and for making AI and robots inseparable from the daily human lives in America and elsewhere in the First World.

There are three major issues and problems in manufacturing globally.

There is the need to innovate and strengthen the American national manufacturing capability, capacity, and diversity, on Earth and in outer space.

There is the global limit or cap on the total supply of human factory workers. Presently, in AD 2022, the global manufacturing systems have already exhausted a significant portion of the global supply of cheap human factory workers.

There is the need of humanity to expand into outer space in massive scale, for securing more resources and space for humanity; there is the need to have astronomical numbers of robot laborers in outer space to serve the human interests in outer-space mining, construction, manufacturing, and service.

Advancing artificial intelligence and robotics will address and solve all of the above major issues and problems in manufacturing and humanity expansion.

This project contributes to solving the human labor supply limitation problem on Earth and in outer space via enabling ubiquitous robotics that renders the First World human existence improbable and impossible without embodied AI and robotics.

This project is a part of the essential work that must be done to achieve Allen Young's aim of exponentially increasing the mining, raw materials processing, manufacturing, and construction capabilities in America and elsewhere in the First World, at first on Earth, and eventually in outer space.

Allen Young deems that in order to make artificial intelligence and robots ubiquitous in America, robotize the American national economy, and hence double the American annual GDP to US\$50 trillion, US\$25 trillion more than the pre-robotization level, the following must be achieved.

In order for robots to be ubiquitous, robots must be able to see like humans, process visual information in humanlike ways to visually plan and execute navigation and object manipulation in humanlike ways. Moreover, through advances in artificial intelligence, robots must increasingly think and solve problems like humans, especially visually.

In order for robots to be ubiquitous, robots must be made of artificial or synthetic bones, muscles, tendons, ligaments, skins, nerves, ion liquid energy channels, and malleable batteries—not of motors, wires, plastics, metals, and solid-casing batteries—for enabling robots to perform any and every physical task that humans can.

In order for robots to be ubiquitous, the activities that humans will perform using the versatile and high-dexterity robots must be designed and mass-marketed.

This project contributes to enabling machines to be an integral part of human intention, perception, and motor actions.

Advancing artificial intelligence and robotics for creating human-like visual capabilities and dexterity in machines requires far more advanced and complex modeling, analysis, simulation, prediction, and understanding of how the human intentions, perceptions, and behaviors work. As such, this project contributes to replicating in machines the human need and want awareness capabilities—so that humans can have access to more humanlike machine capabilities for their use.

The broadest impact of this project is contributing to benefiting the public, consumers, businesses, industries, and institutions, initially in America and elsewhere in the First World, and then eventually in developing nations—through advancing and commercializing humanlike artificial intelligence and robotics technologies.

This project contributes to advancing artificial intelligence and robotics for creating far-reaching socioeconomic transformations in America and elsewhere; this project contributes to creating humanlike artificial intelligence and robotics technologies with humanlike visual and dexterity capabilities that will revolutionize and reinvigorate the American manufacturing, vastly increase the manufacturing productivity, capability, capacity, and output in America and elsewhere in the First World, and create vastly increased net material wealth across the entire humanity.

This project contributes to addressing the supplies of human factory workers having reached their limits and caps at the global level, even in the most populous nations like China; this project contributes to creating artificial intelligence and robotics technologies with human need and want awareness capabilities that will alleviate and permanently remove the factory worker shortage problems in America and elsewhere.

Moreover, this project contributes to creating the artificial intelligence and robotics technologies with human need and want awareness capabilities that can be used in outer space in massive numbers, for mass-scale outer space mining, manufacturing, construction, and mass-scale human habitat building and maintenance—for enabling interplanetary mass-scale outer space humanity expansion in the Solar System.

Constant supply of cheap manual labor is necessary for creating and sustaining abundant material wealth. The human world has been running out of abundant cheap manual labor supply

due to the human-worker wage increases, rising standards of human living, and continuous socioeconomic developments in the world.

In order to create even more abundant material wealth in the future, not just on Earth but in outer space as well, there must be even more constant supply of cheap manual labor. However, over two centuries of industrialization have been maximizing the use of cheap human manual labor across the world, and at this point in time, in AD 2022, the global supply of cheap human manual labor has been running out, and the increase in human-worker wages and shortages, and inflation is in widespread effect.

Advancing artificial intelligence and robotics for providing unlimited supply of cheap mental and manual labor for providing abundant material wealth to human beings, not just on Earth but in outer space as well, is not only the proper approach to permanently solve the constant cheap mental and manual labor supply constraint problem, but also the only approach available.

For further socioeconomic development and advancement, America and the rest of the First World, must advance and embrace the artificial intelligence and robotics technologies that will provide virtually unlimited supply of cheap mental and manual labor on Earth and in outer space—for removing human mental and manual labor limitations and improving the human condition, for building and maintaining more advanced human habitats not just on Earth but in outer space as well. America and the rest of the First World must place astronomical numbers of robots working in outer space to support human life in outer space, with millions of humans living in each outer-space city, not just a few people living in an outer-space human habitat.

Providing unlimited supplies of cheap and abundant artificial intelligence systems and robots for mental and manual labor that can perform the mental and manual tasks that only humans could, will create enormous material wealth for humans on Earth and in outer space, particularly for America and the rest of the First World.

In the not-too-distant future, humans shouldn't be doing boring, redundant, and mechanical jobs at all; eventually, humanlike artificial intelligence and robots that are managed by human workers, should do all the robotic mental and manual work, and human workers should specialize even more in doing the jobs that require human taste and judgment, for creating even greater human possibilities, promises, and prosperity. There must be advanced artificial intelligence and robots, so that robots can do all the robotic work, and humans can be more human and do more of humanly work.

This project contributes to advancing artificial intelligence and robotics for broadening the human capabilities, possibilities, and prosperity for the human multitudes, particularly in America and elsewhere in the First World.

This project contributes to advancing artificial intelligence and robotics for dramatically cheapening the mental and manual labor cost through using humanlike artificial intelligence and robots, and increasing the mining, manufacturing, and construction capabilities in America and elsewhere in the First World, on Earth and in outer space.

AI-enablement and Robotization of the U.S. Military

Robocentric, Allen Young's American high-tech corporation, plans and executes being a military artificial intelligence and robotics technology supplier to the U.S. military and the U.S. ally militaries, by providing advanced artificial intelligence and robotics software and hardware products for military defense and offence. Robocentric aims to strengthen the U.S. military capabilities through the U.S. military AI-enablement and robotization. This project aims to provide a set of scientific bases and technology paradigms that will be used in creating artificial intelligence and robot technologies that are adaptable to human intentions and perceptions and behaviors that Robocentric will market to the U.S. and U.S. ally militaries.

About Robocentric

Robocentric is an American high-tech corporation that publicly promotes and advances the science, technology, and capitalism of artificial intelligence, robotics, human immortality biotech, and interplanetary, interstellar, and intergalactic mass-scale outer space humanity expansion tech.

Building Robocentric—for advancing artificial intelligence, robotics, human immortality biotech, and interplanetary, interstellar, and intergalactic mass-scale outer space humanity expansion tech via R&D and commercialization—is a multidecadal commitment of Allen Young.

NOTICE Robocentric Biotech is not a conventional bioscience laboratory or R&D facility or biomedical research institution: Rather, Robocentric Biotech is a sensor, scanner, modeler, designer, synthesizer, and replacer biotech R&D and commercialization business with a long-term (multidecadal) aim of developing and commercializing its own human immortality biotechnologies. Robocentric does not breed or produce laboratory animals, such as laboratory mice, for developing its biotech. Robocentric doesn't do genetically engineered plant and animal production unless it is for testing its own genetic engineering biotech. Robocentric doesn't do testing on live animals except for clinical trials for testing its own human or nonhuman disease cure or for testing its own sensor and scanner biotech. Robocentric Biotech's main strategy is developing and commercializing its own biomatter synthesizer biotechnologies for biomanufacturing biochemicals, biomolecules, monomers, polymers, cell components, cells, tissues, organs, organ systems, whole bodies, consumer and industrial biomaterials and pseudo-biomaterials such as artificial cells and tissues and cell-like systems, and bioelectronic devices: Robocentric Biotech's key focus is developing and commercializing its own biomatter synthesizer technologies, not breeding animals and plants, not performing incremental bioscience researches. Robocentric performs testing on live and dead animal and plant biomatter (such as cells, tissues, and organs), only when it is absolutely necessary for developing and testing its own biotechnologies. Robocentric Biotech is led by Allen Young, a college dropout.

Read *The Future*, the book written by Allen Young, the transhumanistic Asian-American man, that explains how Allen Young and his transhumanistic American high-tech corporation, Robocentric, advance AI, robotics, human immortality biotech, and mass-scale outer space humanity expansion tech. Visit Robocentric.com/Future to learn how AI, robotics, human immortality biotech, and mass-scale outer space humanity expansion tech will alter the human

reality! Be special: Be in the know in advancing transhumanism by visiting Robocentric.com/Future and reading *The Future*!

Robocentric needs investors for advancing AI, robotics, human immortality biotech, and mass-scale outer space humanity expansion tech! Allen Young, the transhumanistic Asian-American man, a college dropout, Robocentric CEO is currently working on commercializing the AI and robotics technologies that he has developed. Robocentric is seeking investors for bringing the next-generation AI and robotics technologies to the market. Investing in Robocentric comes with unconditional remaining investor money return via share buyback at the purchase price. Visit Robocentric.com/Investors for more info and to invest in Robocentric!

In order to advance the science and technology and capitalism in artificial intelligence, robotics, human immortality biotech, and mass-scale outer space humanity expansion tech—for doubling the American national annual GDP to US\$50 trillion and beyond by fully robotizing the American national economy on Earth, and sextupling the American national annual GDP to US\$150 trillion and beyond by fully transhumanizing the American national economy on Earth and in outer space—Robocentric, the transhumanistic American high-tech corporation, performs a number of its own science and technology research projects under Allen Young's leadership. Visit Robocentric.com/Projects to learn about the transhumanistic science and technology researches that Robocentric performs under Allen Young's leadership, before making the decision to invest in Robocentric at Robocentric.com/Investors.

If you're an investor, visit Robocentric.com/PitchDeck to learn about Robocentric's overall business plan for advancing transhumanism in America and elsewhere in the First World. Advancing artificial intelligence, robotics, human immortality biotech, and mass-scale outer space humanity expansion tech needs your support. You can support advancing AI, robotics, human immortality biotech, and mass-scale outer space tech by investing in Robocentric through purchasing one or more Robocentric stocks at Robocentric.com/Investors. You can provide support by making one or more donations at Robocentric.com/Donation. You can provide support by purchasing one or more merchandise items at Robocentric.com/Merchandise.

If you want to contact Allen Young, the transhumanistic Asian-American man, Robocentric CEO, for business related issues or investing in Robocentric for advancing AI, robotics, human immortality biotech, and mass-scale outer space humanity expansion tech, visit Robocentric.com/Contact.

Allen Young, the transhumanistic Asian-American man, Robocentric CEO, is looking for people to work with! Currently, Allen Young is working on getting the initial funding for Robocentric, so there's no immediate open positions. But in the future, there will be. If you're interested in working on advancing AI, robotics, human immortality biotech, and/or mass-scale outer space humanity expansion tech, visit Robocentric.com/Jobs.

If you want to know more about Allen Young, the transhumanistic Asian-American man, Robocentric CEO, who publicly promotes and advances the science, technology, and capitalism of artificial intelligence, robotics, human immortality biotech, human genetic screening and engineering biotech, nanotechnology, neurotechnology, bionic biotech, and interplanetary,

interstellar, and intergalactic mass-scale outer space humanity expansion tech, visit Robocentric.com/Bio for Allen Young's biosketch and autobiography.

References

Allen Young, "The Future: How artificial intelligence, robotics, human body biotech, and mass-scale outer space tech will alter the human reality", May AD 2022, Robocentric.com/Future.

Allen Young, "The Integrated Artificial Intelligence, Robotics, Human Body Biotech, and Mass-Scale Outer Space Tech Promotion, Research, Development, and Commercialization: The Masterplan for Transhumanizing the Human Species", May AD 2022, Robocentric.com/Plan.

Allen Young, "Humanlike Robot Vision, Visual Robot Control, and Robot Work-Management Software Development for Commercialization (Robocentric Science and Technology Project Description)", July AD 2022, Robocentric.com/Projects.

Allen Young, "Human and Humanlike Learning and Knowledge-Application Science and Technology for Making Humanlike AI And Robots Ubiquitous in America and Elsewhere in the First World (Robocentric Science and Technology Project Description)", July AD 2022, Robocentric.com/Projects.

Allen Young, "Human-Robot Interactions and Integration Modeling for Enabling Ubiquitous Robotics (Robocentric Science and Technology Project Description)", July AD 2022, Robocentric.com/Projects.

Allen Young, "All-Encompassing Biosensing System for Enabling the Human Immortality Biotech and Other Biotechnologies (Robocentric Science and Technology Project Description)", July AD 2022, Robocentric.com/Projects.

Allen Young, "Biophotonic Technologies for Enabling the Human Immortality Biotech and Other Biotechnologies (Robocentric Science and Technology Project Description)", July AD 2022, Robocentric.com/Projects.

Allen Young, "Comprehensive and All-inclusive Biomechanics and Mechanobiology with Applications in Humanoid Robotics, Embodied AI, Human Immortality Biotech, Neurotech, Outer-Space Tech, and Biomedical Tech (Robocentric Science and Technology Project Description)", July AD 2022, Robocentric.com/Projects.

Allen Young, "Astronomically Parallel Human-cell Biomanufacturing for Enabling the Human Immortality Biotech (Robocentric Science and Technology Project Description)", July AD 2022, Robocentric.com/Projects.

Allen Young, "Human Body QMASPer for Computationally Modeling the Human Physiological and Pathophysiological Structures and Processes, and 3D Human Tissue and Organ and Limb and Whole Body Biomanufacturing, for Enabling the Human Immortality Biotech (Robocentric Science and Technology Project Description)", July AD 2022, Robocentric.com/Projects.

Allen Young, "Trans-evolutionary Synthetic Cell Design and Biomanufacturing for Enabling the Human Immortality Biotech, Other Biotechnologies, and Post-Homo Sapiens Human Biological Experiences and Realities (Robocentric Science and Technology Project Description)", July AD 2022, [Robocentric.com/Projects](https://www.robocentric.com/projects).