Trust Agreement for Rada Research Trust

On this day of Feb 20, 2023, I, Roy F. Rada, of Winter Park, Florida, hereby establish the Rada Research Trust. and appoint myself as Trustee and declare that this Trust is held and administered as follows.

1 Abstract

1.1 Trust Purpose

This Trust is being created to provide for the convenient administration of the assets of this Trust without the necessity of court supervision in the event of the Trustor's incapacity or death.

1.2 Authority

Any person shall deal with the Trustee without the approval of any court, the Trustor, or any beneficiary of any Trust created by this Trust and shall assume that the Trustee has the same power and authority to act as an individual does in the management of his or her own affairs. No entity dealing with the Trustee or keeping any assets of the Trust Estate shall be required to investigate the authority of the Trustee for entering any transaction involving assets of the Trust Estate.

1.3 Abstract of Trust

To facilitate the convenient administration of the Trust, including the registration and transfer of assets to and from the Trust, the Trustee shall have the power to execute an Abstract of Trust describing any Trust matter, including but not limited to a description of the Trust terms, the administrative powers of the Trustee, and the identity of any current Trustee. Any person presented with a copy of the Abstract plus any other page of the Trust shall accept same as conclusive proof of the terms and authority granted by this Trust and shall assume that no conflicting directions or terms are contained in the pages omitted.

1.4 Trust Registration and Tax Identification

Registration: A Trust does not need to be registered with the Clerk of the Court in Florida. Furthermore, upon the Death of the Trustor the Trust continues to not be required to be registered with the Clerk of the Court. Unless in conflict with applicable local law, this trust shall not be required to be registered and shall be administered free from the act of supervision of any court.

During the life of the Grantor, the Trust may be titled Rada Research Trust.

Tax Identification: During the life of the Trustor, the Trustee reports to the IRS through the Trustor's Social Security Number of 310-50-0008. Upon the death of the Trustor and the Trust becoming Irrevocable, the Trustee shall apply to the IRS for a Federal Tax Identification Number for the Trust.

1.5 No Contest

I have carefully thought about the distributions set forth in this Trust and have taken into consideration all individuals, including both relatives and non-relatives, that have been named beneficiaries or who I determined not to name beneficiaries.

If any person shall, in any manner, directly or indirectly, attempt to contest or oppose the validity of this agreement, (including any amendment to this agreement) or commences, continues, or prosecutes any legal proceedings to set this agreement aside, then such person shall no longer be a beneficiary of mine. Across any Trust or other asset-holding instrument of mine which names beneficiaries, that contestant shall forfeit his or her share, cease to have any right or interest in the trust property, and shall, for purposes of this agreement, be deemed to have predeceased me without living issue.

1.6 Severability

If any provision of this Declaration of Trust is ruled unenforceable, the remaining provisions shall stay in effect.

1.7 Family

My wife's name is Pauline Elizabeth Rada. I have exactly three children:

- Ray Max Rada born March 15, 1998,
- Rosa Rada born January 2, 1996, and
- Roy Anthony Rada born September 18, 1990.

My son Ray and daughter Rosa are the children of my Wife and me. The unwed mother of Roy against my wishes permanently left with Roy when he was a few weeks old.

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3 Trust Provisions During My Lifetime

3.1 Funding, Income, and Principal

Funding: I may fund this trust during my lifetime by transferring assets to the trustee. The assets that fund this trust shall collectively be called the "principal". I or my agents may transfer assets at any time into the Trust. These assets may generate income that is added to the Trust. These assets and their retained, generated income together constitute the Trust Estate.

Use of Income and Principal: Upon my demand, at any time and in any amounts, the Trustee shall pay to me the income earned on the Trust Estate and any portion, or all, of the principal of the Trust Estate.

Gifts: If during my lifetime I want to donate assets to a charity from the Trust and get a charitable deduction, then the Trustee shall confirm with the charity that the receipt should be provided to my name and my personal tax id.

3.2 After my Death or Incapacity

Upon my death or incapacity, Pauline Rada shall serve as the trustee of this trust.

Determination of Incapacity: I shall be considered incapacitated if the Trustee receives at least two physicians' statements showing that I am incapacitated and unable to manage my financial affairs.

Recovery from Incapacity. If I recover from my incapacity, then I shall be reinstated as trustee. Verification of my recovery shall require written certification from two physicians that I am competent and able to deal with the trust properly and to exercise the rights and powers reserved hereunder in my best interests.

3.3 Revocation or Amendment

I have been advised with respect to the differences between revocable and irrevocable trusts and hereby declare that this Trust is revocable. I may at any time revoke or amend this Trust, in its entirety or in part, without notifying any beneficiary but by a signed writing, which shall be delivered to all Trustees. This right of revocation or amendment may not be exercised by any other person, including my attorney-in-fact or anyone else serving as a fiduciary.

3.4 My Death

When I die, this trust shall become irrevocable. It may not be amended or altered, except as provided by this Trust. The Trust may be terminated only by the distributions authorized by this Trust.

4 Trust Provisions After My Death

4.1 Beneficiaries

This Trust will support the legacy of the Trustor as a researcher in artificial intelligence and contribute to advances in science, engineering, and health care as delineated in a separate Appendix which defines the class of possible beneficiaries. The specific beneficiaries have not yet been identified. For instance, the Trustee has the option to award scholarships for study or awards for certain achievements, but no awardees have been yet identified.

4.2 Payment of Expenses of Estate on my Death

After my death, to the extent that Trustee is either requested in writing by the executor or personal representative of my estate or required by a legal obligation of the Trust, the Trustee shall pay its portion of the expenses as next described. I expect to have multiple trusts transferred from Revocable to Irrevocable status on my death. Expenses that arise from elsewhere, such as expenses associated with disposing of my body after death, I expect to be shared among my trusts in proportion to the Trust Estate value of each Trust. Expenses that are particular to this Trust, such as taxes owed to the government based on transactions specific to this Trust, shall be paid exclusively by this Trust.

4.3 Expenses on an Ongoing Basis

The Trust may have ongoing expenses, such as for expenses incurred by the Trustee in discharging Trustee duties. These expenses must be paid each year before the value of the Fund for the year is determined and before the Beneficiaries get anything.

4.4 Tax Consequences

Based on my reading of the current tax rules, my impression is that the Trust will pay taxes on any income which it receives but not on any interest or dividends earned that year that go to the beneficiary that year. Since the Trust is likely to give funds to entities or for purposes that the IRS would allow to be considered tax deductible, such as giving money to a US state university for the university to award scholarships, the Trustee should be attentive to such considerations.

4.5 Prohibition of Alienation

No beneficiary of any Trust (except the Trustor) shall have any right or power to anticipate, pledge, assign, sell, transfer, alienate or encumber his or her interest in the Trust, in any way. No interest in any Trust shall, in any manner, be liable for or subject to the debts, liabilities or obligations of such beneficiary or claims of any sort against such beneficiary.

4.6 Disclaimer

Any beneficiary of any Trust shall have the right to disclaim his or her interest in said Trust. Said disclaimer may be affected in compliance with the requirements of the laws of any jurisdiction in which any Trust may be administered. Alternatively, the Trustee may act upon any written disclaimer of any interest, in whole or in

part, in any Trust. In the event any beneficiary is incapacitated, the Trustee may accept the disclaimer of a legal or natural guardian of said beneficiary.

4.7 Distribution of Assets

Depending on which approaches are chosen in the choice of beneficiaries, the Trustee may either distribute only the income of the Trust for 15 years or may also choose to dip into principal. At the beginning of the sixteenth year, the assets of the Trust minus necessary expenses will pass in their entirety to the Beneficiaries as specified by the Trustee and constrained by descriptions in the Appendix.

4.8 Investments

I want the Trust to invest in some combination of small cap, value stock and long-term, high-quality bonds where the combination could be anywhere from all of one and none of the other to half of each. The Trustee may decide. Further details about these two options follow.

One recommendation is to invest all the assets in value, small cap, equity ETFs or index funds. The reason for this recommendation is that value, small-cap stock have proven to have a higher rate of return than other stock categories. Additionally, the Grantor recommends that the value, small cap, ETF or fund have:

- net assets exceeding $1 billion,
- no load fee on entry or exit,
- gross expense ratio annually less than 1%.

I suggest diversification both by geography and industry, but this could be achieved by having one ETF that emphasizes one area and another that emphasizes another. The small, value stock investing approach has shown in some historical studies to provide a geometric mean return of 1.12. However, the return may be much lower or higher in any given year.

If one wants a return that is more predictable from year to year but with a smaller geometric mean over the years, then bonds might be a better choice. If the Trust invests exclusively in a fixed-rate, fixed term bond whose term corresponds to the longevity of the Trust, then the beneficiaries might anticipate a constant income from the Trust each year. Long-term, high quality, fixed rate corporate US bonds in early 2023 are paying approximately a 5% annual, nominal return. If the Trust started with a cash value of $2.5 m, then a 5% return would generate $125,000 per year.

5 Trustees

5.1 During my Lifetime

During my lifetime, I shall serve as trustee.

5.2 Support during Incapacity

I expect to have multiple revocable living trusts in effect. Expenses that arise from elsewhere, such as expenses associated with my health care, I expect to be shared among my various trusts in proportion to the Trust Estate value of each Trust. Expenses that are particular to this Trust, such as taxes owed to the government based on transactions specific to this Trust, shall be paid exclusively by this Trust.

Given the preceding proviso of sharing of costs among Trusts, If I am incapacitated, the trustees shall use any amount of trust income or trust principal necessary for my proper health care, support, maintenance, comfort and welfare. My express desire is that the Trustee apply income liberally to maximize my remaining quality-adjusted life years. Furthermore, I strongly prefer not to be hospitalized or otherwise institutionalized because I desire as much freedom as possible and my experience of being institutionalized is that my freedom is abrogated. In other words, I wish that the Trustee use whatever expenses are reasonable to accommodate my living freely in a home situation where I have full authority over my behavior.

5.3 Successors, Co-Trustees, and Decision Making

Alternate Successor Trustee. If Pauline Rada, is unable or unwilling to serve as trustee, then Ray Rada shall serve as trustee.

Alternate Successor Trustee. In the event that my successor trustee, Ray Rada, is unable or unwilling to serve as trustee, Rosa Rada shall serve as trustee.

Alternate Successor Trustee. In the event that my successor trustee, Rosa Rada, is unable or unwilling to serve as trustee, Roy A Rada shall serve as trustee.

Alternate Successor Trustee. In the event that my successor trustee, Roy A Rada, is unable or unwilling to serve as trustee, my former Ph.D. student Hayden Wimmer shall serve as trustee.

Alternate Successor Trustee. In the event that my successor trustee, Hayden Wimmer, is unable or unwilling to serve as trustee, my former Ph.D. student Jie Du shall serve as trustee.

Alternate Successor Trustee. In the event that my successor trustee, Jie Due, is unable or unwilling to serve as trustee, my former Ph.D. student Hafedh Mili shall serve as trustee.

Alternate Successor Trustee. In the event that my successor trustee, Hafedh Mili, is unable or unwilling to serve as trustee, my former Ph.D. student Chaomei Chen shall serve as trustee.

If Chaomei Chen is unable or unwilling to serve as trustee, then the last acting Trustee should distribute the assets of the Trust to a university scholarship fund where Roy Rada studied or worked on the condition that the university shall give the scholarship in the name of Roy F Rada to students pursuing a computer science or information systems degree.

If none of the Trustees specifically named by the Trustor is willing to implement the preceding, final, closing action, then the Trustee shall appoint a successor trustee of an individual, a bank, or a trust company.

If last acting Trustee fails to appoint a successor Trustee, then the Court shall intervene and appoint Northern Trust as the Trustee, unless Northern Trust is unwilling in which case the biggest competitor to Northern Trust that is willing to accept the Trust will be appointed.

Co-Trustees: The Trustee may request that someone join him or her as a Co-Trustee.

Decision-Making when More Than One Trustee: When there is more than one Trustee at any one time, a majority decision shall control. Where no majority decision can be made, then the first Trustee whose name appears in the Trust Agreement shall make the final decision.

5.4 Compensation of Trustee and Accounting

The trustee shall be entitled to reasonable compensation consistent with the laws of the State of Florida. In addition, the Trustee shall be reimbursed for reasonable expenses incurred by the Trustee in the administration of this Trust.

Accounting: The Trustee shall render an annual accounting, upon the termination of the trust, and at any other times which the Trustee may deem necessary or advisable. The written approval of the beneficiaries as to all matters and transactions shown in the account, shall be final, binding and conclusive upon all such persons, and upon all persons who may then be, or thereafter become, entitled to any income or principal of this Trust. The written approval or assent of the persons mentioned in this Section shall have the same force and effect in discharging the Trustee as a decree by a court of competent jurisdiction. However, any such written approval shall not enlarge or shift the beneficial interest of any beneficiary.

5.5 Removal of Trustee and Liability

Removal of Trustee: I may, at any time, appoint and later remove any other trustee(s), to act with me or in my place, by a signed writing. After my death, or if due to my incapacity I am unable to remove the trustee, Pauline Rada shall have the power to remove a trustee.

Liability of Trustee: With respect to the exercise or non-exercise of discretionary powers granted by this Declaration of Trust, the trustee shall not be liable for actions taken in good faith. Such actions shall be binding on all persons interested in the trust property.

5.6 Resignation of Trustee, Power to Appoint, and Bond

Resignation of Trustee: Any Trustee in office may resign at any time by signing a notice of resignation. The Trustee shall be deliver his resignation to the person or institution who is either named in this Trust or is appointed by the Trustee to next serve as the Trustee The resigning Trustee shall, at the request of the remaining or successor Trustee, promptly deliver such assignments, transfers, and other instruments as may be reasonably required for fully vesting in such remaining or successor Trustee all rights, title and interest in the Trust Estate.

Bond: This Trust requires no bond for a Trustee named in the Trust.

Deciding Principal versus Income: The final decision of what's principal and what's income rests with the Trustee, as the lines between principal and income sometimes blur.

6 Administration of the Trust

6.1 Records, Minimum Value, and Spendthrift Provision

Accounts and Records. During such time as I am not acting as Trustee, the Trustee shall keep all records and accounts of the trusts created herein and annually or more often render to the Beneficiary a statement showing in detail receipts, disbursements and distributions from the Trust, and the market value of all Trust assets.

Minimum Value of Trust. If at any time the Trustee, in its discretion, shall determine that it is not economically feasible to continue the administration of any Trust created hereunder, the Trustee may, but need not,

terminate such Trust and distribute the Trust property proportionately to the persons then entitled to receive the income from such trust.

Spendthrift Provision. No beneficiary entitled to any form of future distribution from a trust created hereunder, shall take or have any title in the Trust until the same shall be received. Further, no disposition, charge or encumbrance by way of anticipation by any beneficiary shall be of any validity or legal effect, nor shall the future interest of such person be in any way liable for any claim of a creditor, spouse, divorced spouse, or any other claimant to whom a beneficiary may be in any way liable, nor shall it be subject to any legal process or bankruptcy proceeding.

6.2 Disability and Receipt

Disability. A fiduciary or a beneficiary shall be deemed to be disabled if a licensed physician certifies or, if required, a court having jurisdiction determines that due to physical or mental conditions the person is unable to exercise judgment about or attend to property or financial matters. The settlor desires that, if requested, any fiduciary or successor fiduciary sign an authorization under the Health Insurance Portability and Accountability Act permitting any fiduciary or named successor fiduciary to receive medical information necessary to confirm his or her ability or inability to serve as a fiduciary.

Receipt from a Beneficiary. Whenever payments are made to a minor or to a person who is disabled as defined in this trust, the receipt of the person, the person's natural guardian, or the person's legal representative shall exonerate the trustee. The trustee need not see to the proper application of the distribution.

6.3 Governing Law, Survival, and Perpetuities

Governing Law. The Trust shall be governed and construed in all respects according to the laws of the State of Florida. In the event any Trust or asset is being administered in another state, this Trust may be regulated by the laws of such state if needed to avoid excessive administrative expense, or to uphold the validity of any of the terms of this Trust.

Survival. Unless otherwise specified in this instrument, no person shall be considered to have survived another or to be living upon the death of another if he or she dies within 30 days after the death of the other person. Unless otherwise specifically provided in this Agreement, a gift fails if a beneficiary does not survive and there is no substitute beneficiary indicated in this Agreement who satisfies the conditions for taking. Any person who is not identified as a substitute beneficiary in this document shall not take under the provisions of an anti-lapse statute.

Rule Against Perpetuities. If this Trust Agreement shall violate any applicable rule against perpetuities, accumulation or any similar rule or law, the Trustee is hereby direct ed to terminate such trust on the date limited by such rule of law, and thereupon the property held in the Trust affected by this Section, shall be distributed to the persons then entitled to share the income from the property in the proportions in which they are then entitled to share such income.

6.4 Captions

Section Numbers and Headings have been inserted for convenience only and such shall not be construed to affect the interpretation of any provision of this Agreement or to limit or broaden the terms of any provision.

7 Powers of the Trustee

7.1 General Powers

The trustee shall have the discretionary administrative power to deal with any property held in the principal as freely as I might in the handling of my own affairs, subject to the constraints that when this Trust becomes Irrevocable after my death that the constraints on investing given elsewhere in this document hold. Further, I hereby grant to the trustee all the powers conferred by the laws of any state in which the trustee may act on behalf of the trust so long as the Trustee does not violate intentions specific to this Trust.

Trustee Decision is Final: The exercise by the Trustee of the discretionary powers herein granted with respect to payment, distribution or application of principal or income is final and conclusive. No Trustee shall be required to obtain the approval of any court for any action of such Trustee unless approval is required by law or by a specific requirement in this Trust Agreement.

7.2 Specific Powers

Without in any way limiting the generality of the foregoing, the trustee is hereby granted the following specific powers in addition to and not in substitution for powers previously conferred:

To take possession, custody, or control of assets transferred to the trust, to receive assets from fiduciaries or other sources that are acceptable to the trustee, and to retain assets that trustee may receive, including

assets in which trustee is personally interested, in accordance with the prudent investor rule of the State of Florida.

To determine whether any money or property coming into its possession shall be treated as principal or income, and to charge or apportion expenses, or losses to principal or income as the trustee, in its sole discretion, may deem just and equitable.

To perform, compromise, or refuse the performance of the grantor's contracts that are obligations of the trust, as the trustee may determine under the circumstances.

To abandon an asset when, in the opinion of Trustee, it is valueless, is so encumbered, or is in a condition that it is of no benefit to the trust.

To make, revise, or revoke any available allocation, agreement, consent, or election affecting any tax in conjunction with the settlor's personal representative, if any, that is appropriate in order to carry out the settlor's estate planning objectives and to reduce the overall burden of taxation, both in the present and in the future. This authority includes the power to exclude or include any assets from the gross estate for federal estate tax purposes, value any assets for federal estate tax purposes, and pay taxes, assessments, penalties, and interest and contest or sue for refunds of those payments.

To have access to Grantor's entire medical and medical billing record.

To insure the assets of the trust against damage, loss, and liability and the trustee against liability as to third persons.

To engage and pay reasonable compensation to lawyers, accountants, consultants, or other professionals for information and services relating to the trust.

7.3 Delegation to Others

Delegation to Successor Trustee: Any Trustee may delegate any management function of any Trust to any other Successor Trustee (even though the Successor Trustee is not then serving as Trustee) upon such terms as may be agreed by the Trustees. In the event more than one Trustee is serving, Trust assets may be held in the name of one Trustee.

Delegation to Support Staff: The Trustee may employ or retain accountants, agents, legal counsel, investment advisers, and other experts as the Trustee shall deem advisable. The Trustee may rely on the advice furnished and fix the compensation of such persons.

7.4 Limitations on Discretionary Authority

Notwithstanding anything in this Trust to the contrary, no single Trustee shall:

a) Have the authority to appoint income or principal of any trust formed under this Trust Agreement to himself or herself, his or her creditors, his or her estate, creditors of his or her estate; or to or for the benefit of any child to whom he or she owes a legal obligation of support and for which such appointment of income or principal would constitute a discharge of such legal obligation of support.

b) Participate in any decisions regarding the discretionary distribution of income or principal to himself or herself, or to or for his or her benefit.

c) In the event any Trustee is in a position where such a decision would have to be made, such Trustee shall not participate in such a decision and instead any co-Trustee shall make such decision. Further, if there is no co-Trustee, then the next named successor Trustee under this Trust Agreement who is willing and able to participate shall so participate in such decision.

8 Certification of Grantor

I certify that I have read this Declaration of Trust and that it correctly states the terms and conditions under which the trust property is to be held, managed and disposed of by the trustee, and I approve the Declaration of Trust.

/s/ Roy F Rada

NAME, Grantor and Trustee: Roy F Rada Dated: Feb 23, 2023

/s/ Carol A Pelleu 2.23.2023

NAME, First Witness: CAROL A PELLEU

/s/ Jazmine Sanchez 2.23.23

NAME, Second Witness: Jazmine Sanchez

FLORIDA NOTARY ACKNOWLEDGMENT
STATE OF FLORIDA, COUNTY OF Orange

The foregoing instrument was acknowledged before me by means of ☒ physical presence or ☐ online notarization, this DATE February 23, 2023 by Roy F Rada (name of person acknowledging).

(Seal)

NOTARY PUBLIC
TERESE RAKE
Notary Public, State of Florida
Commission# HH 248378
My comm. expires April 01, 2026

Signature of Notary Public
Print, Type/Stamp Name of Notary
Terese Rake

Personally known: _____
OR Produced Identification: X
Type of Identification Produced: FL Driver License

9 Appendix

I want to leave a legacy consistently with the vision of my life and want to dedicate part of my life savings to that purpose. Since I have not yet enacted enough of a plan to be comfortable that it will automatically prosper autonomously after my death, I present next some alternatives that I have explored and leave to my Trustee to choose among these alternatives what seems most doable and impactful. This document begins with the simplest scheme titled 'Scholarships'. After that I go into detail about two plans titled 'Lending' and 'Awards'.

9.1 Scholarships

Perhaps the simplest thing to do but still allow me to get my name associated with my cause in a long-term way is to give small scholarships to many people over many years. Consider all the places where I studied or worked for more than one year and make arrangement with as many of them as practical to establish a Roy F Rada Scholarship for students pursuing work related to artificial intelligence.

9.1.1 Entities to Approach

Some places that fit the bill can be determined from my resume currently accessible at userpages.umbc.edu/~rada which includes:

1) Ph.D. from University of Illinois
2) M.D. from Baylor College of Medicine
3) B.A. from Yale University in Psychology
4) Professor, Department of Information Systems at the University of Maryland at Baltimore County,
5) Professor of Software Engineering, Washington State University, Pullman, Washington.
6) Professor of Computer Science, University of Liverpool, England.
7) Editor of Index Medicus, National Library of Medicine, Bethesda, Maryland.
8) Assistant Professor, Dept. Computer Science, Wayne State University, Detroit, Michigan.

I add to that list two entries High School Degree: Bowie High School and Master's Degree: University of Houston in Computer Science.

I would also like to add another two organizations to the mix which are the Association of Computing Machinery in which I was actively involved for many years and which awarded me an ACM Fellow. ACM gives scholarships for women in computing, and I would be willing to have a named scholarship that was for women in computing. I was active in the Healthcare Information and Management Systems Society (HIMSS) much more briefly than in ACM but also respect that organization. HIMSS has a foundation that accepts donations and gives grants.

My list of institutions based on the preceding story is

1) University of Illinois at Champaign-Urbana
2) Baylor College of Medicine
3) Yale University
4) UMBC
5) Washington State University
6) University of Liverpool
7) National Library of Medicine
8) Wayne State University
9) Bowie High School
10) University of Houston
11) Association of Computing Machinery
12) HIMSS

I have not approached these places to ask whether they would accept a donation with the condition that it be used to create a named scholarship. However, in my experience most such entities are happy to accept donations, even with strings attached. NLM accepts a donation with strings attached according to https://www.nlm.nih.gov/about/donations.html.

9.1.2 My Conditions

For a place such as NLM, I would be amenable to changes in the target so that instead of focusing on artificial intelligence the recipients of the scholarship from NLM would want to engage in studies relevant to facilitating the mission of NLM.

I'm not looking to simply give one scholarship once but want the institution, such as NLM or Yale, to create a fund from which earning would be used to support a scholarship. Such a donation incurs cost to an institution and places like Yale might take substantially off the top of the fund to manage the fund.

My goal would be to maximize the visibility of my name as donating to this worth cause. I know that some scholarships are very meager, such as $500 for one semester support, while some are very generous, and provide full-tuition and cost-of-living expenses for an entire degree program which at a place like Yale could be $400,000 for one student for one degree. I'm not prepared to provide the $400,000 kind of scholarship and would be closer to the $500 kind.

I am sure enough of those organizations would want my money to be able to create named scholarships from a fund that lasted in perpetuity or something close to that. I am not clear however how much money each would require at a minimum to create a named scholarship now what other conditions the institutions might impose. I suggest doing some investigating online as to these questions. At some point one might want to send emails to the organizations stating our objectives and seeing how they respond.

Based on the responses, I would want to maximize my impact by having scholarships at the places which have the highest visibility and the greatest reputations, which would be places like Yale, University of Illinois, National Library of Medicine, and ACM but their restrictions and demands might also be the greatest. The place of which I most fond personally is the University of Liverpool in the sense of my having had the best years of my professional life there, and in that sense I'd be most inclined to work with Liverpool, but in the 27 years since I have left Liverpool, I have had no interaction with the University of Liverpool and nobody there remembers me or cares about me. The people with whom I still stay in touch are some of my PhD students who have long since been working somewhere else.

9.1.3 Other Targets

My former PhD students might also be good people to approach about collaborating in creating named scholarships. Some might be happy to work in this direction particularly when they got credit too, such as by creating a scholarship at their current university which scholarship Is named for both me and my former student. The names of my former students who seem most germane this to are Hafedh Mili at UQAM, Mahmoud Mhashi at Univ Tarbuk, Chaomei Chen at Drexel, Jie Due at Grand Valley State Univ. and Hayden Wimmer at Georgia Southern Univ.

Some entities are focused exclusively on brokering between donors and students seeking scholarships. For instance, scholarships.org solicits money from donors who want to create a named scholarship. Scholarships.org then advertises the scholarship, invites applicants, chooses a scholarship winner, and awards and administers that student's scholarship. That would be an easy way to give money to an entity and have scholarships created but it seems to me that a place like scholarships.org is less likely to survive or handle my money responsibly than a long-lived university. Further investigation is merited.

Another source to consider would be the Trust itself. Namely, the Trust could advertise scholarships, accept applications, and so on.

9.1.4 Taxes

Taxes are another issue to consider. A donation to a non-profit educational organization should allow a deduction from income of the Trust. Investigating the details of that might be important. For instance, given that my Trust is based in the US and if the IRS gives tax deductions only for contributions to American organizations, then we might want less to donate to a place in a foreign country. Otherwise, I'm in favor of foreign countries.

9.2 Lending

9.2.1 Preview

The design presented in this document begins with a top-level tabular form that shows input, process, and output columns for each of several hierarchically related components. The entity doing the lending will be referred to as Meta. The ensuing 'Narrative' describes in English those tables. The narrative explains that Meta would attempt to make small loans or investments to people, groups, or organizations that would agree

to try to repay Meta and to become part of a community of Meta awardees that would support one another. Since the particulars of what loans or investments should be offered is unclear, Meta expects to begin with a reverse auction approach where people seeking support would specify what they wanted and their qualifications through answering branching questionnaires online.

The Design moves from tabular and narrative presentations to showing flowcharts meant to be the next step before coding. Admittedly only the beginnings of this flowcharting activity have been attempted to date. For instance, this document gives a flowchart for the login operation but that is not unique to Meta and is less important than many other parts of Meta that are not yet detailed. The document is a preliminary draft.

The Design section also shows sample questions that might be asked of applicants and how the answers of those applicants would be evaluated. More generally, the evaluation of Meta's progress over time is described in a way that should support automatic assessment and modification of Meta's behavior. Most crucially Meta must learn and grow.

9.2.2 Lending and Investing Design

To get a clearer picture of what Meta will do, a prototype system would be helpful. The 'Vision and Framework' Section specified some requirements for a prototype. The next step before code would be a design. This Section begins with a tabular description of the design and progresses through subsequent sub-sections to a flowchart.

9.2.2.1 Top-Level Input-Output in Tabular Form

The tabular description of Meta contains a hierarchical decomposition of tables with the top-level table indicating the role of money. Subsequent tables are labeled: basic maintenance, business, and adaptability. Each table has three columns: input, process, and output.

Top Level		
Input	Process	Output
Money.		Money.
Applications for money		Requirements on receivers

basic maintenance		
Input	Process	Output
Meta Money	specified in charter	Invest in small-cap value global stock fund
Dividends from stock brokerage	stored in Meta bank	
	from Meta bank	Pay for computers
Government Requirements	specified in charter	File Taxes; Maintain legal identity

Business		
Input	Process	Output
Applications for loan or investment		Loans or investments to successful applicants
Borrowers repay	into Meta bank	
Borrowers comment on others		Community of borrowers

Adaptability		
Input	Process	Output
Money. Existing program for Meta.	Reproduction with change	Meta offspring

Assessment of previous results	Differentially weight existing components.	

9.2.2.2 Narrative

The world of Meta has multiple dimensions to include information, money, and people. To get returns on information that Meta shares, it will ask its partners to form a community that gives feedback to its members. To get returns on money, Meta will make loans or investments.

9.2.2.2.1 Loans

What should be the attributes of Meta's loans? For instance, should the borrower get an interest free loan for 1 year made in monthly installments of $500. Should the borrower at end of each month submit a report on progress in a public place for comment?

Parameters of the loan itself

- Amount of loan
- Duration
- Given at once or regular payments in exchange for progress reports and feedback on other people's progress reports.
- Interest which could be zero or any other amount
- collateral: real estate second lien, other collateral, or no collateral.

9.2.2.2.2 Reverse Auction

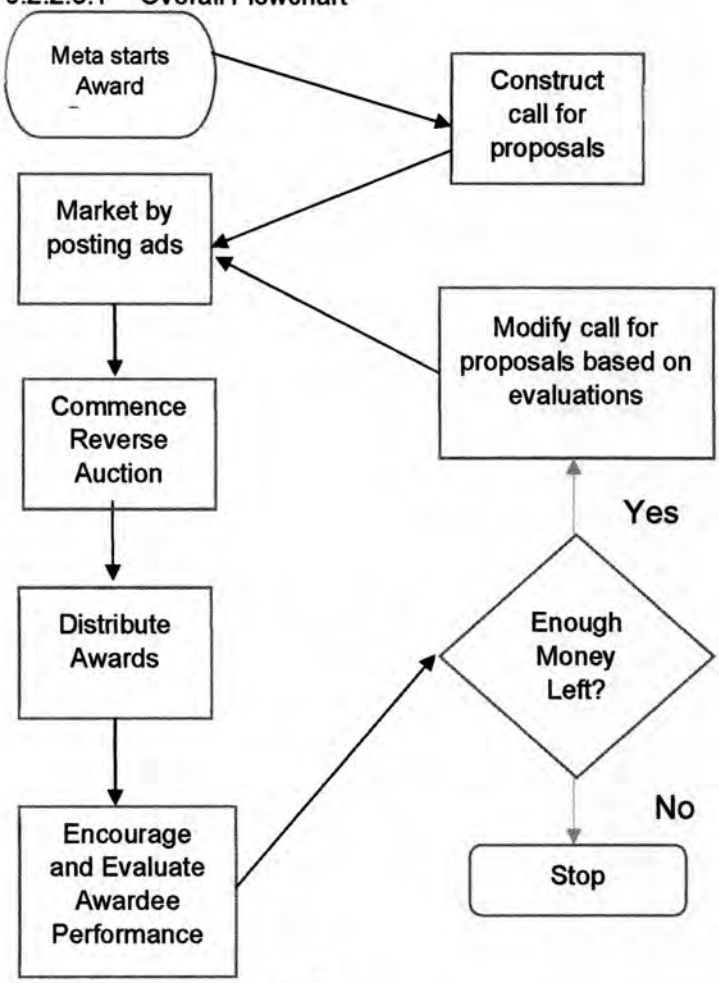
Since Meta does not know what would work and does not have a vested interest in a particular detail, a reverse auction might be appropriate. In a reverse auction, the buyer puts up a request for a required good or service. Sellers then place bids for the amount they are willing to receive for the good or service, and at the end of the auction the seller with the lowest amount wins.

Meta could initially start with one site having one set of starting conditions and see what, if anything, gets any bids. If a successful format for getting a winning bid is achieved and over time the awardee(s) succeed by Meta's criteria, then Meta could generate another site Meta2 that took a different but related approach and see how Meta2's performance compares to that of Meta.

9.2.2.3 Lending Flowcharts and Questionnaires

One way to go into finer detail on the software needed for Meta is to provide flowcharts that show how information or other resources flow through Meta. The interaction with applicants and awardees includes questionnaires that the users complete, and thus greater detail of how Meta works is provided by illustrating those questionnaires.

9.2.2.3.1 Overall Flowchart



This flowchart would be augmented by workflow diagrams that indicated who did what when.

9.2.2.3.2 Reverse Auction Questionnaire

In the reverse auction, the applicant specifies who he is and what he wants. The categories of questions may be grouped as who are you, what have you done, what do you want, and what are you willing to do.

9.2.2.3.2.1 Who are you?

Are you

1) individual or
2) entity?

If entity, then are you

1) profit or
2) non-profit?

What is highest level of education of applicant?

1) high school degree,
2) bachelor's degree,
3) master's degree, or
4) doctorate.

What is area of expertise of person making application? (We provide a list of areas and ask applicant to pick the most relevant). Choose from:

1. Art; Humanities
2. Biology; Communications
3. Business Administration; Earth Sciences; Education; Health; Physical Sciences; Psychology; Social Sciences
4. Engineering; Mathematics
5. Computer Science

If you are a for-profit entity, then are you

1. an LLC
2. a C-Corp

If you are a C-Corp, then what fraction of the shares do the largest shareholders own:

1. 60%
2. between 40 and 60%
3. < 40%

9.2.2.3.2.2 What have you done?

How many citations does Google Scholar show to your publications?

1) 0
2) 1-10
3) 11-50
4) 51 or more

How many patents have been granted to your entity?

1) 0
2) 1-2
3) 3-5
4) 6 or more

If you are now part of an entity that you helped create, how many full-time equivalent employees does this entity now have?

1) 1-3
2) 4-8
3) 9-25
4) 26 or more

What is your debt to assets ratio? (Debt is short- and long-term loans and money owed on supplies, people, or anything else and assets are cash, inventory, property, and money owed to

you. Most people consider goodwill an asset, but Meta dismisses it; and more generally, Meta dismisses subjectively valued items such as value of intellectual property, proprietary information, and brand name).

1) > 1
2) 0.6 to 1.0
3) 0.4 to 0.6
4) 0 to 0.4

What is your gross margin % (gross margin % =(revenue - cost of goods sold)/ revenue)?

1) 0 to 7
2) 8 to 15
3) greater than 15

What is your quick ratio where (quick ratio = (cash & equivalents + marketable securities + accounts receivable)/ current liabilities)?

1) less than 0.9
2) 0.9 to 1.3
3) greater than 1.3

What is your total liabilities/total assets?

1) greater than 0.6
2) less than 0.6

What is your total revenues 3 yr compound annual growth rate?

1) less than or = 2%
2) greater than 2%

What is your net income 3 yr compound annual growth rate?

1) less than or = 2%
2) greater than 2%

9.2.2.3.2.3 What do you want?

Do you want a

1) grant,
2) contract,
3) loan, or
4) investment?

What total amount do you expect?

1) More than $10,000
2) From $5,000 to $10,000
3) From $1,000 to $5,000

3)

What duration do you want?

1) Three years
2) Two years
3) One year
4) Less than one year.

You want your payments

1) All at the beginning
2) In equally divided monthly installments

If you accept a loan, then you want to pay what interest rate?

1) 0%
2) US Federal Funds Rate +1%
3) US Federal Funds Rate + 2%

If you accept a loan, then will you offer a lien (second or otherwise) on real estate or other form of collateral?

1) no
2) other collateral
3) second lien on real estate

If your entity is a privately held limited liability company, then do you offer Meta membership in the partnership for 'profit-sharing only purposes' with Meta's share being equal to the proportion of capital in the company divided into the amount of Meta's contribution?

1) no
2) yes

9.2.2.3.2.4 What are you willing to do?

You would like to report on your progress for public consumption with what frequency?

1) Never
2) Annually
3) Quarterly
4) Monthly

Are you willing to give feedback online to be shared publicly on three other awardees at the same time as you make your own progress reports?

1) no
2) yes.

9.2.2.3.3 Evaluating Applicants

The answers by applicants to the questionnaire would be evaluated in an algorithmic fashion. The results of the algorithmic ranking would be accessible to all applicants and applicants who want to continue would be required to return to the system and give feedback on the results of the evaluation.

9.2.2.3.3.1 Algorithmic Scoring

In each of the four categories the maximum points possible summed over all answers is as shown in the Table. For each applicant Meta adds together in each category the points associated with their answers. By way of illustration, if a category had three questions and each of those questions had multiple choice answers, and the applicant chose the first option (worth 1 point) for each question, then the applicant earned 4*1 = 4 points in that category.

Category	Max	Weight
who are you	2+2+4+4+5+5 = 22	1
what have you done	4+4+4+4 = 16	1
what do you want	3+2+3+2= 10	3
what are you willing to do	4+2+3+3+2 = 14	3

After the numbers are scored by category, then Meta multiplies the number in each category by the weight given in the table. Finally, Meta sums the weighted totals by category to create one integer for the candidate. Based on the design, Meta would be assuming that the candidates with the highest scores were most deserving of an award.

9.2.2.3.3.2 Applicant-to-Applicant Feedback

The candidates would be invited to review their scoring and the scoring of every other applicant. Candidates would

- vote on value of each individual question and to
- propose
    - modifications of existing questions,
    - new questions, and
    - changes to the weighting scheme
- vote on the worthiness of each applicant, as the candidate wishes

9.2.2.3.3.3 Awards Made

Meta would delete, edit, or add questions and modify its weighting scheme based on the feedback. Meta would create a new ranking of applicants based on

- its original assessment,
- a merger of its own weighting scheme and candidates votes, and
- activity of candidates in previous phase.

Then Meta would make awards.

9.2.2.4 Evaluating Progress

Meta would continuously monitor its overall progress and attempt to improve itself. This monitoring would consider the applicants' progress over time, the activity at the Meta web site, interactions among awardees, and profitability.

9.2.2.4.1 Applicant Progress

The application would sketch a monthly timeline of objectives and ten monthly deliverables that indicate progress towards its entity's goal. If the application is accepted, then each month the awardee would submit a progress report. If Meta accepts the report as adequate proof of progress, then that month's payment is made, otherwise not.

Each deliverable would come in the form of a document which the applicant is willing to share with the public and which document demonstrates a contribution to society or financial progress. An example of a contribution-to-society deliverable would be a document published in that month which is cited on scholar.google.com. Each deliverable would include the awardee as the author of the document with affiliation given as the registered entity that applied. Examples of financial progress could be a contract committing payment to the entity or the release of a lien previously held against the entity. Since the future is not known, the schedule of deliverables is not a commitment to those specific deliverables, but

each month the awardee would explain how progress compared to the original objectives and to previous monthly reports.

9.2.2.4.2 Activity at Meta Website

The activity at the Meta website would be monitored to determine when corrective action was needed and in what direction. These attributes include:

- Number of visits to the Meta site.
- Slope of visits to site versus month. From one month to next month this slope is simply # visits month k - # visits month k-1 and more generally slope between any number j of months is (# visits month k - # visits month k-j)/j. For Meta the more positive the slope, the better.
- Number of applications received.
- Ratio of applications/visits.
- Slope of ratio of applications/visits
- Number of applicants willing to take a loan. And ratio of loan/applications
- Number of applicants willing to sell shares. And ratio of shares/applications.

Of course, these attributers themselves are subject to change.

9.2.2.4.3 Comments

As applicants are required to interact with one another, monitoring that interaction is crucial to Meta's being able to improve. Meta would monitor:

- How many comments were made?
- How many comments were expected based on previous commitments?
- Rate of change in comments.

Applicants would also provide feedback on Meta's performance.

9.2.2.4.4 Money

Meta would monitor these monetary attributes:

- How much money was given by Meta in the past month to awardees and what was rate of change in money to awardees?
- How much money was spent for everything but awards (and rate of change)?
- How much money was earned from money invested with the stockbroker and rate of change?
- How much money was given to Meta by awardees as payment on loans and rate of change?
- How much money from ownership of shares and rate of change?

9.2.2.5 Learning and Reproduction

Meta would look at the assessment values that are going differently from what Meta would like and modify parameters so that its system might move in the desired direction. For instance, imagine that Meta receives enough people who are willing to make comments and payoff a loan but want more than $10,000, then to modify the questions to make them more useful, Meta could change the initial question from

What total amount do you expect?

1) More than $10,000
2) From $5,000 to $10,000
3) From $1,000 to $5,000

What total amount do you expect?

1) More than $50,000
2) From $30,000 to $50,000
3) From $20,000 to $30,000
4) From $10,000 to $20,000

The parameters are numeric ranges and given that our hope of enough people wanting $5k but only getting >$10k, the heuristic is to extend the >$10k into multiple options and drop the options that no one wanted.

If Meta had enough money, then it could reproduce another system Meta2 that was given money to start and had changes to its program. Eventually, if there could be multiple descendants of Meta, they could reproduce with one another and exploit heuristics used by nature, such as cross-over of homologous chromosomes. In unicellular organisms, one reason reproduction occurs as a way of growing rather than the cell getting larger is that the need to move nutrients into the cell and excrete waste is limited by the surface area of the cell. As the cell gets larger the volume increases much more quickly than the surface area and moving matter into and from the cell cannot serve the needs of the larger volume. While software systems, such as Meta, are different in many ways from cells, analogies can be made. If users who come to Meta must explore through many options, they may experience cognitive overload and leave. Thus, producing many small Metas, each with a distinct purpose or style, might facilitate attracting and maintaining an audience. For instance, Meta has the option of offering awards, loans, or investments. These three offerings are crucially enough different that they need different types of audiences to succeed and rather than trying to guide different audience types through one large Meta, Meta might do better to have 3 smaller offspring, one for awards, one for loans, and one for investments.

This design for a simple Meta would facilitate the writing of code for a prototype. The expectation is that such an exercise would lead to a better appreciation of the challenges. The challenges can be distinguished at the top level as those which require human intervention and those which can be done by Meta in software alone. The parts that require human intervention include those which establish and maintain a) a brokerage and bank accounts for Meta and b) legal and tax filings. These money and legal concerns contrast with purely information concerns. The information concerns are what are being detailed in this report. Developing the design with adaptability in mind shows the need for adjustable parameters.

9.3 Awards

An alternative to awarding scholarships or loans is to give awards for achievement. This section on awards refers to the awarding entity as The Entity (TE),

9.3.1 High-Level Algorithm

TE will be instantiated as a website that is largely governed by its algorithm and interactions with its constituents who may annually vote to change TE. TE will give awards to people who are advancing the vision of TE.

9.3.1.1 The Entity

Every year the website will invite all award winners to participate in the governance of TE. At this annual virtual event, the rules of TE will be open to discussion and members may submit proposals for changes to the rules. Some things will be straightforward, such as changing keywords used in the search to identify relevant documents. Some things will be less straightforward, such as changing the obligations of awardees. If a quorum of members is present and most of those present vote in favor of a motion, then the motion is passed. The intention is to build a community of affinity which takes pride in its membership and wants to perpetuate TE.

9.3.1.2 The Awards Process

TE will begin by focusing exclusively on awarding rising stars in the relevant research areas as manifested by citations to journal papers received by those stars. A citation database, such as Google Scholar, will be searched with keywords relevant to the vision of TE and retrieved articles will then be sorted by the frequency with which they have been cited by other researchers. The rising stars will be invited to receive a cash award and to participate online in the community of other awardees over years.

9.3.1.2.1 Overall

An algorithm will be used to identify potential awardees. In the first phase, TE will focus on awarding researchers based on citation patterns. However, this is not meant to be the sole domain of TE. The expectation is that TE might extend its operations over the years to include other measures of success.

After rising-star researchers relevant to the interests of TE have been identified, they will be contacted to invite them to receive a reward and to form a community established at TE. The community members will hopefully find intrinsic reward in being connected with their peers, but to facilitate progress, cash awards will be offered. To facilitate that TE perpetuates itself for decades, the community will operate on democratic principles and each year may vote to change features of the system.

9.3.1.2.2 The Research Citation Mechanism

This section addresses low-level details of how the determination of awardee status based on journal paper citations might be pursued. Since a possible expansion later of TE to address also patents is envisioned and that patent award process would seem to be isomorphic to the process for journal paper citations, both are described next.

TE will search for publicly accessible documents that contain keywords deemed relevant to TE which keywords by way of illustration might include 'artificial intelligence', 'evolution', 'gradualness', 'cybernetics', 'self-organizing', 'learning', 'computers', 'robotics', and 'natural language processing'. Documents here refers to two classes of documents: journal papers published in refereed journals and patents registered with a national patent office. For each journal paper (patent) retrieved as potentially relevant, the frequency of citation by other journal papers (patents) will be determined. For journal papers this information comes readily from various publicly accessible databases such as 'Google Scholar'.

Once frequently cited authors are determined, a further analysis will determine the rate of change of citations for those authors. TE is not looking so much to reward those who have long established themselves as senior members of their profession, who are most likely rich in funds and followers, but rather is looking to acknowledge the rising stars. Thus, after identifying those with above average citation counts over all their publications, the algorithm will do retrievals on time slices of the past and determine for those authors how their citations are growing over time. Those with the greatest acceleration in citations will be offered rewards.

Some number (perhaps one hundred) of the 'best' authors will be contacted by email based on their email addresses available from their publications. The contact will invite them to come to the website to say whether they 1) agree that their publications match the criteria of TE and 2) would accept a reward.

9.3.1.3 Money Management

The original endowment will be invested in a global, small-cap stock index, and net income from that investment will be distributed to awardees. Other donors may also give funds to TE and then determine the direction of TE.

9.3.1.3.1 Investment of Principal and Payout above Geometric Mean

The seed money of TE will be invested. The initial intention is to put it all in a global, small cap equity fund and keep it there forever. Annually when the geometric mean of the annual returns of the fund over its history are greater than 1, TE will pay-out some percentage (perhaps 85%) of its net income in awards.

9.3.1.3.2 Distribution of Awards

Each awardee will receive only a small monetary sum in the initial life of TE, though that might change through time, as everything else. If TE had an endowment of ten million USD, generated a net income of 5% per year from investing its endowment, and dispensed 85% of its net income each year, then the annual distribution is 0.05 * 0.85 * 10**6 = 4.25*10**5 or $425,000.

If 100 people are offered awards each year, then the per person reward is only $4,250. Furthermore, this reward will not be distributed in one lump sum in the first year. Instead, the money will be distributed to each award winner in parts over several years with the first award simply based on agreeing to accept the award, but the subsequent year awards are contingent on the person returning to TE website at least once during that year to make a constructive comment on the work of another award winner (that other award winner must not be a co-author of the commenter). Being an awardee confers on the author both an opportunity and an obligation to continue to participate in the life of the community by giving feedback to other authors and to governance of TE.

9.3.1.3.3 Donors

While TE has been privately endowed by one individual initially, it will accept donations, and any donors will have special rights. Those rights include pre-eminently the opportunity to determine how their money will be used. If the new donor's intention is to simply further TE's work as already defined, then no further changes to TE operating procedure are required, except that the amount of principal endowment will have increased and accordingly the net income to distribute in awards should also proportionally increase. Any donors will automatically earn the rights of an award winner to participate in the governance of TE.

9.3.2 Design

TE operates as a semi-automated, role-based, work-flow management system. An organizational model will be developed that identifies the functions of the public, funders, nominees, awardees, and any roles mandated by external, government. Data flow, workflow, and connections to external entities will be rigorously specified.

TE operates as a semi-automated, role-based, work-flow management system. The roles are

- General Public: Members of the public can see everything in the system and can post comments but have no official voting capacity or other responsibility.
- Funders: Funders have donated money to the system and can propose changes to the system and vote on the nominees for awards.
- Nominees: Nominees have been listed as potential awardees and their comments on other potential awardees or nominees carry special weight.
- Awardees: Awardees receive monetary awards after fulfilling certain requirements. First, the awardee is notified of likely award and must acknowledge publications relevance and willingness to accept reward. Part of award is given in first year and rest of award is given in annual increments after awardee makes constructive comment to other awardee(s).
- Regulatory Mandatory Roles: TE will aim to become a part of another entity that handles the governmental regulatory requirements. In any case, TE needs to be prepared to fulfill the responsibilities of filing forms with the government, to include prominently forms to the taxing authority of the country or other political entities that have jurisdiction over TE. Lawyers and accountants may be needed.

External Data Sources: TE will access various external data sources to fulfill its mission. These sources, as everything with the system, may change over time, but initially for journal citation data Google Scholar is considered a likely source. Other citation data sources include Microsoft Academic and Web of Science, but neither is freely available. A stock brokerage firm will be used to hold the principal of TE.

A data base search and analysis subsystem will collect citation data and process it to determine nominees for awards.

The communications subsystem will send emails to those initially selected as awardees to invite them to visit the site, register, acknowledge and accept their award. Emails will also be sent to awardees in subsequent years to remind them of their opportunities.

A workflow subsystem will manage the logging into the system of members other than the General Public and will support those others in discharging their responsibilities on the website.

9.3.3 Simpler

The plan outlined above is exceedingly ambitious and thus unlikely to succeed. Many simpler plans are possible, and another alternative is to pitch the ambitious plan and seek a partner to mute it or make it more likely to succeed.

Many stripped-down versions of the ambitious plan can be imagined. One way to simplify is to remove the automatic selection of winners and instead turn the picking to some existing organization which is familiar with picking winners and just add to their armamentarium by providing some funds for one of their existing or a new award. Another approach is to make the automated selection of a winner less complex and not require a community to develop.

9.3.3.1 An Existing Community

The Association of Computing Machinery is the world's largest scientific and educational computing society. Its dozens of journals branded "Transactions" are some of the most influential in the computing world, and its dozens of Special Interest Groups (SIGs) are key to its development of community. Both ACM as the parent and each of its SIGs are fond of giving awards to members for research, teaching, or service contributions. Some of the awards are associated with monetary prizes but the key to the award's significance is its denotation of excellence in the community.

9.3.3.1.1 ACM SIGs

A simplified plan would be to associate with a SIG for that SIG to award prize not already given but consistent somehow with the vision of this estate plan. Of the SIGs relevant to the topic of this Estate Plan, a few samples, not meant to be exhaustive, includes:

- SIGACT - Special Interest Group on Algorithms & Computation Theory
- SIGAI - Special Interest Group on Artificial Intelligence
- SIGBio - Special Interest Group on Bioinformatics, Computational Biology
- SIGEVO - Special Interest Group on Genetic and Evolutionary Computation
- SIGKDD - Special Interest Group on Knowledge Discovery and Data Mining
- SIGSIM - Special Interest Group on Simulation

A sample of the awards given by some of these SIGs follows:

- SIGACT gives awards of which 3 are associated with monetary prizes varying from $500 to $5,000 each. Most of the prizes are associated with a name, such as the Knuth Prize for Outstanding Contributions to the Foundations of Computer Science.
- SIGAI has 3 awards: the Annual Award for Excellence in Autonomous Agent Research with a $1,000 prize. The Doctoral Dissertation Award which provides funds for the student to attend the conference.
- SIGEVO has 3 awards: Best Dissertation Award given at the GECCO and awarding $1,000 to the doctoral candidate deemed to have the most meritorious work in the field of evolutionary computing. The Outstanding Contribution Award which recognizes distinctive contributions to the field of Evolutionary Computation when evaluated over an extended period of at least 15 years and includes a $1,000 award.

One might readily imagine that any SIG would gladly accept a monetary gift that could be added to an existing award or for a new award. If the Estate Plan put $25,000 into an annuity that was paying 4%, then it would generate $1,000 every year for 100 years. Thus, with a mere $25,000 the estate plan could fund an award not dissimilar in size from others in the SIG universe. Probably the ACM requires that the funding provides overhead to ACM. If that overhead were 100% of the award amount so that a $1,000 award required a $2,000 annuity, then this approach would still be eminently doable.

9.3.3.1.2 ACM Journals

At https://dl.acm.org/journals is a list of 63 serial publications and the following 20 have been selected as harmonious with this Estate Plan's interest in new algorithmic, life forms.

1. Collective Intelligence
2. Journal of Data and Information Quality
3. ACM Journal on Emerging Technologies in Computing Systems
4. ACM Transactions on Autonomous and Adaptive Systems
5. ACM Transactions on Accessible Computing
6. ACM Transactions on Applied Perception
7. IEEE/ACM Transactions on Audio, Speech and Language Processing
8. IEEE/ACM Transactions on Computational Biology and Bioinformatics
9. ACM Transactions on Cyber-Physical Systems
10. ACM Transactions on Embedded Computing Systems
11. ACM Transactions on Evolutionary Learning and Optimization
12. ACM Transactions on Human-Robot Interaction
13. ACM Transactions on Interactive Intelligent Systems
14. ACM Transactions on Intelligent Systems and Technology
15. ACM Transactions on Knowledge Discovery from Data
16. ACM Transactions on Design Automation of Electronic Systems
17. ACM Transactions on Modeling and Computer Simulation
18. ACM Transactions on Reconfigurable Technology and Systems
19. ACM Transactions on Social Computing
20. ACM Transactions on the Web

For each journal in the list, the user can click on the journal name and be taken to a fuller description of that journal which includes the 5 authors who have been most cited. For each of those authors one can click on the author's name and get detailed bibliometrics, to include number papers published, number of total citations, and list of my frequently cited papers. A web browser could scan this information and select certain authors to be offered a reward based on certain algorithmically specified criteria.

9.3.3.2 Simplified automatic selection and no community

If The Entity does not want to depend on human committees to choose award winners but wants something much simpler than given in the grand design, then the details of something simpler are next given. Say that the term for searching the literature is "evolutionary computing". Applying the search to Google Scholar one learns quickly that Google Scholar does not support automatic sorting by citation frequency. Instead with Google Scholar the user would need to retrieve results and analyze them outside Google Scholar. With Microsoft Academic, however, searching and then sort by citation frequency is a built-in option open to users. This exercise immediately points to a broader issue of the endless array of information resources and their multi-facetted characteristics which are changing across time.