MAF

Mathematic Advancement Framework

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MAF

A new era of quality mathematics will be ushered in by the MAF platform.
Mathematics is inherently competitive & skill-based.
In Athens, intellectuals debated another in a public spectacle being proof of ability.
In academia, intellectuals hide behind degrees & cluster in peer-defensive flocks.

Mathematics has a periodic nature with the humanity.
Math dominates the field of application, this then is industrialized into mechanics, and then ages into trivialization.

We are in a period of mathematical trivialization.
Mathematics has aged beyond trivialization, into a priestcraft.

Artificial Intelligence

Artificial Intelligence has created a new dimension to the possibility of practical mathematics.
Technology allows the globe to unite to one Athenian platform where intellectualism can be made a spectacle again.
Make Math Proof Again

Artificial Intelligence in MAF will guide the user through the forests of mathematics.
This will be a personal journey tailored explicitly to the individual.
This guide will then assess the ability of the user in each field of mathematics.
Once the user merits proficiency, he then is allowed to compete against other users in various forms.

Public verified profiles allow users to be rated by what they have proven to both Artificial Intelligence & to verified human judges.
The end-game of the users on this platform is to attain permanent achievements which range from prestige to original-creators to professional-advancement.

Science

Math is the science of measure.
To each kind of magnitude exists a distinct type of mathematics.
Each entity of math can be viewed as a tree in a forest.

Each tree [method of measurement] has a foundation, trunk of core principles, stable branches, and lastly developing frontiers of each branch.

Mathematics is a forest of various ways man measures the universe.

Mathematics is only locally hierarchical to its tree [method of measurement].
Each tree stands as a formidable pinnacle of achievement.
Arithmetic is basic and it is frontier in regards to number theory.

MAF respects each tree as valid & equivalent.

Society
Heretofore, math has been a solitary activity.
Gaps of skill are too sparse in any regional to develop a peer-community.
Diversity of trees to choose compounds the ratio of adherents to region.

The only traditional structure of relationships are the master & apprentice, tutor & student.
There exists no competition to prove ability against peers despite its historically competitive nature.

Technique & Theory
Method & manner are inseparable.
To understand something but be unable to do it is the definition of a Dreamer.
Theory must be developed with technique. How knowledge is enacted will structure the conceptual bounds.
Technique must be solidly built upon theory.

State
Math & its progression is presented linear & hierarchal.
Gatekeepers of the science have corrupted it into a superficial & abstract state in order to maintain the priestcraft.
Meritocracy has no environment in academia nor in publishing.

Academia is an institution where privilege, not ability, triumphs.
Graduation is self-referential. Those certifying ability of clients are those teaching the clients. Academia, by design, assesses itself. An inbred institution can produce nothing of value.
Academics by then logically defined as morons.

Academic progression is one-size-fits-all speed-run.
The institutions compete in various royal-roads short-cuts to elitism.
Students are drilled from freshman to graduation to be able to perform a few expert-grade tricks to pretend mastery.
This superficial hold is easily exposed with a slight shift in perspective.

There exists no incentive for academia to establish students with foundational mastery when their bread & butter is teaching cute advanced tricks for students to mimic.
Academia is a parade of chained monkeys.

Prehistoric truth: foundational mastery in mathematics only begins after a decade.
Thus academic mathematicians are all condemned by association.

Books
Books are also subjected to the domain of Gatekeepers.
Published authors attain academic positions.
Thus the quality of books are poor.

Learning mathematics has historically been via books.
Books teach by a linear sequence of facts one-size-fits-all.
Books are broad and never in-depth as a result of the academia ecosystem.

Monographs & treatises are the best mediums of mathematical books.
Neither type has any demand from academic institutions.

Books are non-ideal mediums of information in the science of mathematics.
Math grows in a non-linear progression, best seen as layers & cycles.
The individual journey is unique. For every step forward, take two steps back.
This can be accomplished with a vast library of books, but this path is inefficient.

The main reason books are unsuitable for mathematics is the inability of the printed word to display math.
Math books have very sparse calculations; what computations exist are always in the most meager form.
Translating mathematics to typeface is a struggle for each line.
It is a technically-cumbersome process that is not done by the mathematician.

Handwriting is the medium of calculations.
Compass & straight are the medium of constructions.

Crowdsource
Each element of the MAF repository is a high-quality zoomable image.
Each element is versional to reduce duplication of work.

Each medium is encapsulated as an image.
The element [product] of math is then held independent of the medium.
{ Paper, Chalkboard, IPad, Essay, Graph, Compass-Construction }

Math is no longer linear.
Math is constructed in its natural form which is by nature lengthy expression.

Each element is treated the same, sent to the pool, honorary or ordinary creator.
Tags associate content to topic.Verified users rate the content.

Books are constructed from these elements.
Books are no longer static entities, but living & customizable to each instance.

“I want a geometric interpretation of the Differential Calculus: Product Rule”
{ Proof by rectangular area, proof by spherical trigonometry ... }

Since the dawn of math, efforts survive mainly by luck & ability to publish.
Now all effort survives, devoid of luck & the ability to publish.
Deed & due respect is given.
{ theory, calculation, creation of problem, critiques, construction, interpretation }

Users & Artificial-Intelligence are able to construct books compiled with customized ingredients: calculation, rigor, theory, interpretation, application.

User

Various mediums exist for an individual to express mathematic thought.

{ calculation, essay, syllogism, rigor-formulae, construction, abstraction }

Each medium choice requires equipment for the user.

{ IPad, artbook, compass, pens ...}

Involvement of the users requires equipment, which can be accessed in libraries, schools, or third-party sites.

{ multi-camera, clean-room, proctors ... }

MAF will incorporate devices to interface accessibility to the favorite ways users express mathematics into an image element.

Artificial-Intelligence

Each user is able to choose the type of mentor which will guide him on his journey.
These mentors all tailor the experience to the user, but all rate work in the same way.
The manner of the presentation and the content is unique to each mentor.

Deeds can be verified by Artificial-Intelligence, study, calculation, creation.
These permit different tiers of subscription & equipment cost.
Verified metrics accumulate on the users profile.

AI Mentors tailor the journey to the student in real time. Fast track or a switch-back slow ascent.
Content & delivery can adhere to the current mood, arriving in slow steps to a concrete progression standard to the system to define growth.

The schedule is dynamic to the individual goal and not a systemized expectation.
Different micro-routes may be taken but the destination is maintained.

Exist multiple perspective approaches to each skill.
Activity all associate to a standard skillset. Which allows for placement of ability.

AI Mentors evolve in time and so the standings of users age out.
Users must reprove their proficiency periodically.
This path reinforces users to return upon the foundations.
Each new passage is a new trial with an evolved AI Mentor.
Exploiters of the system will be filtered out in time.

Exist various ways to arrive to a standard position.
Technique heavy with arrays of problems.
Theory heavy with one critical problem to ponder.
Construction heavy with a diagram to focus.
Calculation heavy with a series to compute.

Artificial intelligence can extract from an individual response a standardized solution to compare against a standard expectation.
This allows for the interaction between the user & Mentor to be dictated by the user, while being independent with how the Mentor assesses the ability of the user.

AI Mentors
Geometer
Archimedes: Constructor
Medium: compass & straight

Numeric
Euler: Calculator
Medium: series

Abstraction
Gauss: Rigor
Medium: formula proof

Logic
Boole: Axiomatic Integrity
Medium: syllogism & inference

Common Sense
Poyla: Simplicity
Medium: basic consequence

Intuition
Ramanujan: Polymath
Medium: pattern & symmetry

Foundationalist
Hilbert: Systems
Medium: frameworks in essays

Progression
First: Understanding of subtopic [foundational comprehension]
Second: Proficiency in application [technical mechanics]
Third: Peer to peer competition
Fourth: Portfolio aggregation

Users begin interacting with the AI Mentor, which will guide & test comprehension in the subtopic of choice.
Once the user has proved to the AI Mentor full comprehension, then he achieves the status of Conversant.

The AI Mentor now will test the proficiency of the user's ability to apply their understanding to solve problems.
Once the user has proved capable of solution, he achieves the status of Proficiency.

Proficient users are now able to compete with other peers.
In each tree of mathematics, MAF places each proficient user in a global ranking of skill.
This allows for global sourcing of peers of the same class.
Peer to peer competition proves skill to the world with public archives.

Competition
Each user is verified by biometric data. Thus ability is bound to a single entity.
Peer-to-Peer competition has many layers of involvement.
From informal & quick into highly-controlled & lengthy ordeal.
The rewards also are in a spectrum from trivial to professional growth.

AI is the referee of the competition. This allows for an immediate preliminary ranking.
Judges consist of top-ranking users to allow diverse interpretations of individual work to adjust the verdict.
Judging is how top-users of a tree are able to compete with top-users of another tree using metrics of community enhancement.

Public archives allow for any to inspect the various solutions and rankings.
This keeps the system honest in what was done that failures may be addressed in full light.

Competition is not for the elite only.
Each subtopic has its own arena.
World class geometers can compete against high-schoolers in expansions of binomials or in problems of convergence.
One person to one profile anchors ability to the individual.
This allows for easy compilation of tiers of ability.

Quickmatch
- time: 10 minute
- security level: biometric verification & locked app
- group of peers given the same problem
- solutions are explicit answers
- tests mainly technique and knowledge
- decision: AI judgement
- REWARD: confirmation of ability tested, the base of global ranking

Duel
- time: 60 minute
- security level: two camera clean-room
- general problem
- solution arrived at by method of preference
- tests mainly overall ability & comprehension
- decision: AI judgement with limited appeal to Judges
- REWARD: permanent record, confirmation of placement

Ordeal
- time: 180 minute
- security level: two camera clean-room

60 mins test
break
120 mins general problem
unique perspective & approach
detail & breadth
decision: AI & Dedicated Judges
REWARD: permanent record

Tournament
cost: $10
time:180 minute
security level: testing center
30 mins technical problems & explicit solutions
30 mins essay or proof-exposition
break
120 mins in choice of a selection of problems
decision: AI & dedicated judges & paid professionals
REWARD: gain half of entrance fees in gift-card, Medal, profile status

Masterpiece
time: 3 months
security level: two camera clean-room
creation of a mathematical exposition
decision: community vote, weighted by rank
REWARD: placement in MAF portfolio

Professional
time: 6 months
security level: none
frontier-expanding paper
decision: paid professionals judge
REWARD: World Scholar personal recommendation

Champion
cost: $300
time: annual
security level: in-person convention
open entry for all
each tree will have their own crowned king
first day: various passages of tournaments
decision: AI filter non-qualified
second day: main concept will be framed into an instance for an all-day marathon
main concept of the championship problem announced at the start of the year
decision: judge & weighted-community & professionals
third day: coronation of the new kings
REWARD: World Crown, Professional recommendation, profile privilege

ENDGAME

MAF establishes a progression of a user healthily from start to world-scholar recognition.
All users plow through the initial grind to prove standard ability to the system.
Only proven users pass to be able to compete.

This system blends the competition of gaming and the rigor demanded in professionalism.
What is begun in fun can culminate in deeds that translate into a career path.
{ grants, scholarship, endorsements, certifications, research, teaching }

The networking of the platform extends beyond competition into the ability to form guilds & tutorships of likeminded individuals.

Academia will be balanced with a contender, MAF.
A colosseum of intellectual gladiators whose works are public and whose ability is proved by public competition. Where deeds dominate privilege.
Mathematics is fun, practical, invigorating, and capable of a career.

Portfolio
The true reward of this project is the showcase of the creations of the individual.
The artistic, unique, comprehensive, detailed, over-arching.
Everyone is able to see how your mind thinks in the medium your hands prefer.

Professional personal references accrued.
How you contributed to your generation.
Where you stand from the perspective of a certified individual.

Profile
Profile of the user rewards all work done.
Respect of the community due as reward from competition.
Honor from academia & world certified experts.

Each user has a global ranking in each tree of the mathematic forest.
Each global ranking is compiled each day.
All rankings are publicly accessible.
Accomplishments are permanent.

Users are able to challenge others to supplant their position.
Those who are inactive will fade off the charts.
Whatever privilege placement is able to form will be subject to the public-visible duel-challenge.

All accomplishments will be retained forever in the profile.
As this system ages, generations will be able to compare the current & past.
Generational strengths will be assessed on the whole of mathematics explicitly produced and retained in a pool of images.