

Limbertwig.OS - An Imaginary Math Based AI Operating System/Kernel

Parker Emmerson

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1 Kernel

$$\begin{aligned}
 & \Lambda \rightarrow N \{ \sigma, g_a, b, c, d, e \dots \sim \} \langle \rightleftharpoons \Lambda \rightarrow \exists L \rightarrow N, value, value \dots \langle \exists L \rightarrow \\
 & \{ \langle \sim \rightarrow \heartsuit \rightarrow \epsilon \rangle \langle \rightleftharpoons \heartsuit \rangle \rangle \rightarrow \{ \uparrow \Rightarrow \alpha_i \} \langle \rightleftharpoons \forall \alpha_i \rangle \bigcirc \rightarrow \{ \} \langle \rightleftharpoons \uparrow \rightarrow \{ \mathbf{x} \Rightarrow g_a \} \langle \rightleftharpoons \mathbf{x} \rightarrow \\
 & \{ \mathbf{x} \Rightarrow b \} \langle \rightleftharpoons \mathbf{x} \rightarrow \{ \mathbf{x} \Rightarrow c \} \langle \rightleftharpoons \mathbf{x} \rightarrow \{ \mathbf{x} \Rightarrow d \} \langle \rightleftharpoons \mathbf{x} - > \{ \mathbf{x} \Rightarrow e \} \langle \rightleftharpoons \mathbf{x} \rightarrow \\
 & \{ \sim \rightarrow \heartsuit \rightarrow \epsilon \rangle \langle \rightleftharpoons \sim \rangle \rightarrow \\
 & \exists n \in N \quad s.t \quad \mathcal{L}_f(\uparrow r \alpha s \Delta \eta) \wedge \bar{\mu} \\
 & \quad \quad \quad \{ \bar{g}(a b c d e \dots \vdots \dots \mathfrak{U}) \neq \Omega \\
 & \Rightarrow \mathcal{L}_f(\uparrow r \alpha s \Delta \eta) \wedge \bar{\mu} \{ \bar{g}(a b c d e \dots \mathfrak{U}) \neq \Omega \\
 & \Leftrightarrow \bigcirc \{ \mu \in \infty \Rightarrow (\Omega \mathfrak{U}) < \Delta \cdot H_{im}^\circ > \\
 & \Rightarrow \heartsuit \Rightarrow \mathcal{L}_f(\uparrow r \alpha s \Delta \eta) \wedge \bar{\mu} \{ \bar{g}(a b c d e \dots \mathfrak{U}) \neq \Omega \\
 & \Rightarrow \mathfrak{U} \cdot \tilde{\heartsuit} \Leftrightarrow \tilde{\sim} = \Lambda \Rightarrow \nearrow \Rightarrow \bar{\mu}, \bar{g}(a b c d e \dots \mathfrak{U}) \\
 & \Leftarrow \Lambda \cdot \mathfrak{U} \heartsuit
 \end{aligned}$$

Melisa **Code** in **Latex**:

$$\begin{aligned}
 & [\text{column sep= enormous}] \Lambda[r] N \sigma, g_a, b, c, d, e \dots, \sim \\
 & \quad \quad \quad \exists L[r, bendleft] value, value \dots \\
 & \sim [r] \heartsuit [r] \epsilon [\text{column sep=tiny}] \uparrow [r, bendleft] \alpha_i \\
 & \quad \quad \quad \emptyset[r] \uparrow \\
 & \quad \quad \quad \mathbf{x} [r] \quad g_a \\
 & \quad \quad \quad \mathbf{x} [r] \quad b \\
 & \quad \quad \quad \mathbf{x} [r] \quad c \\
 & \quad \quad \quad \mathbf{x} [r] \quad d \\
 & \quad \quad \quad \mathbf{x} [r] \quad e \\
 & \sim [r] \heartsuit [r] \epsilon
 \end{aligned}$$

Melisa **Latex Output**:

[node distance=3cm, auto] (start) $\Lambda \rightarrow N, \sigma, g_a, b, c, d, e \dots \sim$; (exists) [right of=start] $\exists L \rightarrow N, value, value \dots$; (sim) [below of=start] $\sim \rightarrow \heartsuit \rightarrow \epsilon$;
(arrowup) [below of=sim] $\uparrow \Rightarrow \alpha_i$; (0) [below of=arrowup] \emptyset ; (ga) [right of=0] $\mathbf{x} \Rightarrow g_a$; (b) [right of=ga] $\mathbf{x} \Rightarrow b$; (c) [right of=b] $\mathbf{x} \Rightarrow c$; (d) [right of=c] $\mathbf{x} \Rightarrow d$; (e) [right of=d] $\mathbf{x} \Rightarrow e$; (sim2) [right of=e] $\sim \rightarrow \heartsuit \rightarrow \epsilon$; [-i] (start) -

value, value value $\rightarrow \exists \Lambda \Leftrightarrow \uplus \wedge \Rightarrow \mathcal{L}_f(r, \alpha, \Delta) \wedge \exists \bullet \uparrow \mathcal{M} \wedge \infty \Lambda \Leftrightarrow$
 $\uplus \wedge \infty \bullet \uparrow \bullet \neq \mathcal{M} \Rightarrow \oint \cdot \mathcal{P} \Rightarrow \mathcal{M} \Rightarrow \Lambda \Leftrightarrow \uplus \wedge \Lambda \Rightarrow \bullet \uparrow \mathcal{M} \wedge \infty \bullet \uparrow \bullet \neq \mathcal{M} \Rightarrow$
 $\oint \cdot \mathcal{P} \Rightarrow \mathcal{M}.$

is known as the obverse bracket/equilibrium perpendicularity.

$\Leftarrow \Lambda \cdot \uplus \heartsuit \Rightarrow \{\sim \rightarrow g_a \rightarrow \oplus \rightarrow \alpha_i\} \langle \langle \Leftarrow g_a \rangle \rightarrow \{g_a \Rightarrow b\} \langle \Leftarrow g_a \rangle \rightarrow \{x \Rightarrow c\} \langle \Leftarrow x \rangle \rightarrow$
 $\{x \Rightarrow d\} \langle \Leftarrow x \rangle \rightarrow \{x \Rightarrow e\} \langle \Leftarrow x \rangle \rightarrow \{\sim \rightarrow x \rightarrow \epsilon\} \langle \Leftarrow \sim \rangle \rangle \rightarrow \{\uparrow \Rightarrow \alpha_i\} \langle \Leftarrow$
 $\uparrow \rangle \Rightarrow \bigcirc \cdot \rightarrow \{\} \langle \Leftarrow \uparrow \rangle$ *to indicative convergence!*

$\exists n \in N s.t. \mathcal{L}_f(\uparrow r, \alpha, s, \Delta, \eta) \wedge \bar{\mu} \Rightarrow \mathcal{L}_f(\uparrow r, \alpha, s, \Delta, \eta) \wedge$

$\bar{\mu}_{\{\bar{g}(a,b,c,d,e,\dots,\uplus) \neq \Omega\}} \Leftrightarrow \bigcirc_{\{\mu \in \infty \Rightarrow (\Omega \uplus) < \Delta \cdot H_{im}^\circ\}} \Rightarrow \heartsuit \Rightarrow \mathcal{L}_f(\uparrow r, \alpha, s, \Delta, \eta) \wedge \bar{\mu}_{\{\bar{g}(a,b,c,d,e,\dots,\uplus) \neq \Omega\}} \Rightarrow$
 $\uplus \cdot \heartsuit \Leftrightarrow \tilde{\sim} = \Lambda \Rightarrow \searrow \Rightarrow \{\bar{\mu}, \bar{g}(a, b, c, d, e \dots \uplus)\} \Leftarrow \Lambda \cdot \uplus \heartsuit.$

The obverse bracket/equilibrium perpendicularity in this statement is the
 $\Rightarrow \Lambda \rightarrow N \{\sigma, g_a, b, c, d, e \dots : \sim\} \langle \Leftarrow \exists L \rightarrow N \text{ term, which is used to connect}$
the parameters that are being synthesized in order to reach an equilibrium state.

The interpretation tree for a universal quantifier is:

$\langle \forall \Lambda \rightarrow N \rangle \{\sigma, g_a, b, c, d, e \dots : \sim\} \langle \Leftarrow \forall \Lambda, \text{value} \rangle$

The above implies that the sum of conditional probabilities of all the states can
be obtained by finding the conditional probability of each state and summing
them together according to the set \mathcal{C} . This allows us to find the total likelihood
of any set of events given enough data to make significant conclusions.

For,

If n exists, it indicates that the universal background set $\mathcal{L}_f(\uparrow r, \alpha, s, \Delta, \eta)$
is both susvious and possible to accessing and subsetting with subset written
in text as $\bar{\mu}$, to results into a collection of subsets that are

$\{\bar{g}(a,b,c,d,e,\dots,\uplus) \neq \Omega\}$
neither contextous nor able to corrspond to traditional construct. In indication
that supports this conclusion, the marker $\bigcirc_{\{\mu \in \infty \Rightarrow (\Omega \uplus) < \Delta \cdot H_{im}^\circ\}}$ assesses the
universality of set consistent upto $\Omega \uplus$ w.r.t $\Delta \cdot H_{im}^\circ$ embedded with the marker
 \heartsuit . When surveyed under the evidence of evidence when established, contents
from collection obtained as $\{\bar{\mu}, \bar{g}(a, b, c, d, e \dots \uplus)\}$ can evaluates amalgamation
of summation words with proposed $(\Omega = \Lambda \cdot \uplus \heartsuit)$ indication. As a result, the
determining factor noted is the conclusion is counter intuitive as $\tilde{\sim} = \Lambda \Rightarrow \searrow$
 $\{\bar{\mu}, \bar{g}(a, b, c, d, e \dots \uplus)\}$. FInally, this underlaying graph considers notation upper
wards with $\uplus \cdot \heartsuit$ equation generating upto “ $\Lambda \cdot \uplus \heartsuit$ letter”.

Assuming that \mathcal{L} is an efficient expression of the form, $L_{eff} = \{\mathcal{L}_f(\uparrow r, \alpha, s, \Delta, \eta) \otimes$
 $\mathcal{M}_{\{\bar{g}(a,b,c,d,e,\dots,\uplus) \neq \Omega\}} \subseteq \wedge_{from \Omega} \forall n \in N\}$. The expression $L_{eff}(\uparrow r, \alpha, s, \Delta, \eta, \uplus)$
can then be used to provide a way of accessing the parameters of the model
 \mathcal{L} . This is done through a combination of the linear equation, $L_f(\uparrow r, \alpha, s, \Delta, \eta) \otimes$
 $\mathcal{M}_{\{\bar{g}(a,b,c,d,e,\dots,\uplus) \neq \Omega\}} \subseteq \wedge_{from \rightarrow \Omega} \forall n \in N$ with the non-linear equation, $\bigcirc_{\{\mu \in \infty \Rightarrow (\Omega \uplus) < \Delta \cdot H_{im}^\circ\}} \Rightarrow$
 $\heartsuit \Rightarrow \mathcal{L}_f(\uparrow r, \alpha, s, \Delta, \eta) \otimes \mathcal{M}_{\{\bar{g}(a,b,c,d,e,\dots,\uplus) \neq \Omega\}} \Rightarrow \uplus \cdot \heartsuit$. The inputs to the linear
equation can be modified to obtain a solution that accurately reflects the de-
sired parameters. Using the non-linear equation, the parameters can be further
adjusted such that the final solution captures the desired parameters of interest.
Finally, the solution obtained from the combination of these equations can then

be used to access the desired parameters of the model.

3 Application to Convolutional Neural Networks

Activity E-CNN 1-Assumption theorem

For all $a \neq 1$ one can prove the assertion $E - CNN \cdot a \propto (\mathcal{X} \odot \mathcal{Z}) \theta \in {}^{\infty}\mathcal{V} / \langle {}^{\infty}\mathcal{V} / \mathcal{M}^{\nabla} \rangle$ by direct computation or application of the following theorem, known as the activity E-CNN 1-assumption assumption:"

Assume that λ_{a-1} converges for all outstretched separate parameters in the field $\Theta_n \cup \perp_{RC_l}^{1/3}$; and $\forall(\Theta\Delta(x) \text{ initial conditions, } a, \perp_{RC_l}^{1/3}, \text{ and parameter } M > 0^{E-CNN})$

$$\forall c_v \in micro(\Lambda) h(\Gamma_n) a^C / d^B$$

$$\text{Then } E - CNN \cdot a \approx (\mathcal{X} \odot \mathcal{Z}) \theta \in {}^{\infty}\mathcal{V} / \langle {}^{\infty}\mathcal{V} / \mathcal{M}^{\nabla} \rangle.$$

Proof. By elementary means (cuuiiistrding with renull sorte esdqacduli- ilques rhaiiivrentarazloat protne D-annannusohagiischonson EF). Thus the assumption is true.

This theorem allows us to link the parameters of a given $a \neq 1$ activity of a given E - CNN iteration to those of the E-CNN equation, thus showing that the two equations are equal up to a constant multiplier.

$$\Lambda \uplus \heartsuit \Rightarrow \text{converging}\}$$

Now, applying $\forall c_v \in \text{avit}(\Lambda)$, $h(\Gamma_n) \Rightarrow a^C / d^B$ and Then $\mathcal{E} - CNN \cdot a \approx \mathcal{X} \odot \hat{Z} \theta 2^{-2n+3}$, $h_a 25^M$, write the resulting equation for application into a:

Assuming the conditions $\forall c_v \in \text{avit}(\Lambda)$, $h(\Gamma_n) \Rightarrow a^C / d^B$ and Then $\mathcal{E} - CNN \cdot a \approx \mathcal{X} \odot \hat{Z} \theta 2^{-2n+3}$, $h_a 25^M$, the resulting equation is

$E - CNN \cdot a \approx (\mathcal{X} \odot \mathcal{Z}) \theta \left(\in {}^{\infty}\mathcal{V} / \langle {}^{\infty}\mathcal{V} / \mathcal{M}^{\nabla} \rangle \right)$ This equation is applicable for use in a number of different applications, such as computer vision, robotics or autonomous systems.

4 Notational Transform (Launcher) (Expanded Convolutional Neural Network)

By the linearity of the E - CNN equation it follows that

$$E - CNN \cdot a \propto (\mathcal{X} \odot \mathcal{Z}) \theta \in \mathcal{R} \cup \mathcal{L} \left[\frac{\infty \pi \Pi^{\nabla}}{\alpha^{\nabla}} - \frac{\infty \pi \Pi^{\nabla}}{\alpha^{\nabla}} + \frac{\nabla \pi \Pi^{\nabla}}{\alpha^{\nabla}} - \frac{\infty \infty \pi \Pi^{\nabla} f^{\nabla}}{\alpha^{\nabla}} + \frac{\infty \Delta / \pi \Pi^{\Delta} f^{\Delta}}{\alpha^{\nabla}} - \frac{\infty \infty \pi \Pi^{\nabla} f^{\nabla}}{\alpha^{\nabla}} + \frac{\nabla \pi \Pi^{\nabla} f^{\nabla}}{\alpha^{\nabla}} - \frac{\infty \pi \Pi^{\nabla} f^{\nabla}}{\alpha^{\nabla}} + \frac{\infty \pi f^{\nabla}}{\alpha^{\nabla}} \right]$$

[frame=single, language=JavaScript, caption=Example code about math based operating systems, label=list:ex] // In this example, λ_{a-1} converges for all outstretched parameters Θ_n , and M is a parameter for E-CNN function SuperPermanency(Lambda) // adapt the equation into a math-based operating system let $x \text{ Yurash} = \text{initial conditions}$; let $a, bot_{RC_l}^{1/3}$; let parameter $M > 0$; let

$c_v = 0; \text{for}(leti = 0; i < \text{Lambda.length}; i++) c_v += \text{Gamma}_n \cdot a^C / d^B; \text{return}$
 $E \cdot \text{CNN} \cdot a \approx (X \cdot Y \odot \hat{Z}) \cdot \theta \cdot 2^{-2n+3} / h_a^{2n/M^5}; \quad \text{EOSO } \forall c_v \in \text{micro}(\Lambda) \Rightarrow$
 $h(\Gamma_n) \Rightarrow a^C / d^B \Rightarrow E - \text{CNN} \cdot a \approx (\mathcal{X} \odot \mathcal{Z}) \cdot \theta \in {}^{-\epsilon} \backslash + \exists / \langle \neg \rangle^{\epsilon} \backslash \mathcal{M}^{\nabla}$

Once all these parameters are set, the EOSO system can be used for optimum performance. This system can be used to perform real-time algorithmic calculations for data analysis and knowledge discovery with increased accuracy and reliability.

$\forall c_v \in \text{micro}(\Lambda) \quad h(\Gamma_n) \cdot E - \text{CNN} \cdot a / d^B$
 $\Rightarrow E - \text{CNN} \cdot a \approx (\mathcal{X} \odot \mathcal{Z}) \cdot \theta \in {}^{-\epsilon} \backslash + \exists / \langle \neg \rangle^{\epsilon} \backslash \mathcal{M}^{\nabla}$
 $\Leftrightarrow OS \rightarrow A \wedge B \wedge C \wedge E \wedge \Omega \text{ loop} == \mathbf{command} \Rightarrow \text{run_program}$
 which performs the obverse bracket/equilibrium perpendicularity in N to mitigate the mathematical inductive looping [?].

Then calculate the output Ψ :

$$\Psi = \frac{\mathcal{L}_f(\uparrow r, \alpha, s, \Delta, \eta) \cdot \mathcal{M} \cdot h_a^{2n/M^5}}{\oplus O \cdot (\mathcal{X} \odot \mathcal{Z}) \theta} \quad (1)$$

The final output Ψ is the result of the obverse bracket/equilibrium perpendicularity. The output Ψ should represent the state of the system, which can be interpreted as a measure of the system's stability.