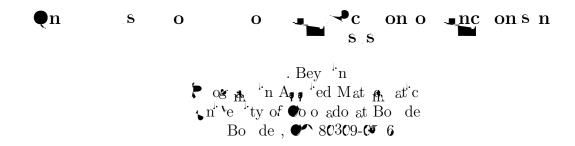
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I Introduction

The latest are noticed any tensor coordinate in the line of the area of the ar

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In the aee eadde term of onthem to cathon of notion in terms eat ae. e con de can ting $-\frac{1}{4}[+)^2--)^2]$. It are a tatte tag the adago t_{1h} is conditional agreement of the action of terms $-\frac{1}{4}[+)^2--)^2$. It are a tatte tag the adago t_{1h} is conditing to each ting terms of terms of terms of terms of the action in the cathon in the c

$$c_{\mathbf{k};\mathbf{k}';\mathbf{l}}^{\mathbf{j};\mathbf{j}';\underline{\mathbf{m}}} = \int_{-\infty}^{+\infty} \ \ \overset{\mathbf{j}}{\mathbf{k}} \left(\right) \ \ \overset{\mathbf{j}'}{\mathbf{k}} \left(\right) \ \ \overset{\mathbf{m}}{\mathbf{k}} \left(\right) \ \ d$$

e e ent a o en , t e n e of t e nonze o of coeff c ent a ge and, at no en o tant, t e n e of o e at on to can t te $\frac{1}{2}$ o o t on a to N_s^3 , e e Ns tenn e of sniftcant coefficient in the eque entation of

In a $n_{\rm th}$ e of a, cat on t e f nct on of inte e t a e t e f nct on t at a e ingradion of a contraction. The $n_{\rm th}$ e of sm figure are et coefficient of c f nct on the contraction of the coefficient of c f nct on the c f nct on the c f

Multiresolution algorithm for evaluating u \mathbf{II}

$$j-j \qquad j \in V_j$$

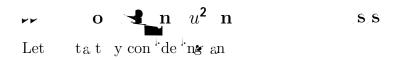
$${}^{2}_{0} - \ {}^{2}_{\mathbf{n}} - \sum_{\mathbf{j}=1}^{\mathbf{j}=\mathbf{n}} \left\{ (\mathbf{j}_{-1})^{2} - (\mathbf{j}_{-1})^{2} \right\} - \sum_{\mathbf{j}=1}^{\mathbf{j}=\mathbf{n}} (\mathbf{j}_{-1} + \mathbf{j}_{-1}) - (\mathbf{j}_{-1})$$

 $\int_{-\infty}^{\infty} ds = \int_{-\infty}^{\infty} ds + \int_{-\infty}^{\infty} ds = \int_{-\infty}^{\infty} ds + \int_{-\infty}^{\infty} ds = \int_{-\infty}^{\infty} d$

$${}_{0}^{2} - {}_{\mathbf{n}}^{2} - \sum_{\mathbf{j}=1}^{\mathbf{j}=\mathbf{n}} {}_{\mathbf{j}} + {}_{\mathbf{j}}) \qquad \qquad (3)$$

O

$$\frac{2}{0}$$
 $\sum_{j=1}^{j=n} j \rightarrow j$) +



cae — I, eca , te t e d e ence and a e age $d_{\mathbf{k}}^{\mathbf{j}+1}$ and $\mathbf{k}^{\mathbf{j}+1}$. e t en add $\mathbf{k}^{\mathbf{j}+1}$ to $\mathbf{k}^{\mathbf{j}+1}$ efo e e and ng t f t e according to t e fo o ing f f d c f e

Te form a fore a at not te dreence and are are $d_{\mathbf{k}}^{\mathbf{j+1}}$ and $d_{\mathbf{k}^{\mathbf{j}}}$ and $d_{\mathbf{k}^{\mathbf{j}}}$ and $d_{\mathbf{k}^{\mathbf{j}}}$ and $d_{\mathbf{k}^{\mathbf{$

$$\sum_{\mathbf{j}=1}^{2} \sum_{\mathbf{k} \in \mathbf{Z}} \hat{d}_{\mathbf{k}}^{\mathbf{j}} + d_{\mathbf{k}}^{\mathbf{j}}) + \sum_{\mathbf{k} \in \mathbf{Z}} \mathbf{k}^{\mathbf{n}} + \mathbf{k}^{\mathbf{n}} + \mathbf{k}^{\mathbf{n}} + \mathbf{k}^{\mathbf{n}}) \lambda_{\mathbf{k}}^{\mathbf{n}})$$

It cea, tatten_m e of operation for central ting teaa evan on of $\frac{2}{0}$ of tona to ten_m e of sniftcant coefficient $d_{\mathbf{k}}$ in teaa e et evan on of 0. In tea to teae, if teo sna factor e e ented y a vector of teans to the enterminant of the entermin $t e n_{11}$ e of ope at on t op o t on a to N. If t e o t na t nct on t e t e ented y os N sn f cant as coeff c ent, t en t e n e of o e at on to can t te t a e o o tona to og N. Te ago tin in te aa a ea y gene a ze to t en t'dh en ona ca e.

$$\mathbf{r}$$
 o \mathbf{l} \mathbf{n} \mathbf{l} \mathbf{r}

e no et n to t e gene a ca e of 'a'e et and de 'e an ago tin to e and .4)
into t e 'a'e et a e . In e n t e ca e of t e aa a ', t e, od ct on a g'en ca e ", o'e " into t e fine ca e and 'e de'e o, an efficient a, oac to and e the open calculate and redered an encent and oac to and encent to open cent and encent and encent to open cent and encent are encent and encent encent according to the encent according to another the encent according to another encent according to a consideration according to a consideration according to a consideration according to according to a consideration according to a conside

$$M_{\mathbf{WWW}}^{\mathbf{j};\mathbf{j}'} \stackrel{'}{\longleftarrow} - \int_{-\infty}^{+\infty} \stackrel{\mathbf{j}}{\longleftarrow}) \stackrel{\mathbf{j}'}{\longleftarrow}) d \qquad \qquad \qquad \underbrace{. 15})$$

$$M_{\mathbf{WWW}}^{\mathbf{j};\mathbf{j'}} \xrightarrow{'} \frac{-\mathbf{j'}=2}{1} \int_{-\infty}^{+\infty} \int_{0}^{\mathbf{j}-\mathbf{j'}} \int_{\mathbf{k}-\mathbf{k'}}^{\mathbf{j}-\mathbf{j'}} \int_{0}^{0} \int_{0}^{1} \int$$

ot at

$$M_{\mathsf{WWW}}^{\mathbf{j};\mathbf{j}'}$$
 $'$ $)$ $\mathbf{j}'=2\tilde{M}_{\mathsf{WWW}}^{\mathbf{j}-\mathbf{j}'}$ $'$ $\mathbf{j}-\mathbf{j}'$ $)$

 $M_{\mathbf{w}\mathbf{w}\mathbf{w}}^{\mathbf{j};\mathbf{j}'} \xrightarrow{'} \stackrel{-\mathbf{j}'=2}{} \tilde{M}_{\mathbf{w}\mathbf{w}\mathbf{w}}^{\mathbf{j}-\mathbf{j}'} \xrightarrow{-} \xrightarrow{\mathbf{j}-\mathbf{j}'} \xrightarrow{-} \xrightarrow{\mathbf{j}}$ e a o o e 'e t at t e coeffec ent 'n .) decay a t e d' tance — — ' et 'een t e cae 'nc ea e . Pe 't ng . .) a

$$\tilde{M}_{\mathbf{WWW}}^{\mathbf{r}} - ^{\prime} ^{\mathbf{r}} ^{\mathbf{r}} - ^{\mathbf{r}} + ^{\mathbf{r}} - ^{\mathbf{r}} - ^{\mathbf{r}} - ^{\mathbf{r}} + ^{\mathbf{r}}$$

and eca instatte est a tyofte, od ct (-r) (-r - + ') inceae inea y t ten_{th} e of an instatt entropy entropy (-r - + ') inceae inea y

$$|\tilde{M}_{\mathbf{WWW}}^{\mathbf{r}} - \mathbf{r} - \mathbf{l})| \leq C^{-\mathbf{r} \cdot \mathbf{M}} \qquad \qquad \mathbf{J} = \mathbf{J} = \mathbf{J} + \mathbf{J} = \mathbf{J} = \mathbf{J} + \mathbf{J} = \mathbf{J} = \mathbf{J} + \mathbf{J} = \mathbf{$$

У

$$M_{\mathbf{V}\,\mathbf{W}}^{\mathbf{j}}: \mathbf{V}_{\mathbf{j}} \times \mathbf{W}_{\mathbf{j}} \to \mathbf{V}_{\mathbf{j}} \bigoplus_{\mathbf{j}_{0} \leq \mathbf{j}' \leq \mathbf{j}} \mathbf{W}_{\mathbf{j}'}$$
 (C)

and

$$M_{\mathbf{WW}}^{\mathbf{j}}: \mathbf{W_{j}} \times \mathbf{W_{j}} \to \mathbf{V_{j}} \bigoplus_{\mathbf{j}_{0} \leq \mathbf{j}' \leq \mathbf{j}} \mathbf{W_{j'}}$$

ince

$$\mathbf{V_{j}} \bigoplus_{\mathbf{j}_{0} \leq \mathbf{j}' \leq \mathbf{j}} \mathbf{W_{j'}} - \mathbf{V_{j_{0}-1}} \qquad \qquad \qquad \qquad \checkmark \qquad . \quad)$$

and

$$\mathbf{V_{j}} \subset \mathbf{V_{j_0-1}} \quad \mathbf{W_{j}} \subset \mathbf{V_{j_0-1}}$$

$$\mathbf{V}_{\mathbf{j}_0-1} imes \mathbf{V}_{\mathbf{j}_0-1} o \mathbf{V}_{\mathbf{j}_0-1}$$

e need 'gn' f cant y fe 'e coeff c'ent t an fo t en a 'ng . 0) and . 1). Indeed, 't' f' c'ent to con 'de on y t e coeff c'ent

$$M_{\underbrace{\hspace{1cm}}' \underbrace{\hspace{1cm}}_{l}) - \underbrace{\hspace{1cm}}^{-j=2} \int_{-\infty}^{+\infty} \underbrace{\hspace{1cm}}_{l} - \underbrace{\hspace{1cm}}_{l} \underbrace{\hspace{1cm}}_{l} - \underbrace{\hspace{1cm}}_{l} \underbrace{\hspace{1cm}}_{l} d \underbrace{\hspace{1cm}}_{l} \underbrace{\hspace{$$

and t ea y to ee t at M_{\downarrow} $'_{l}$) $-\mathbf{j}=2M_{0}$ $-\mathbf{j}$ $(-\mathbf{j})$, \bullet e e

$$M_0 \longleftarrow \int_{-\infty}^{+\infty} (1-x^2) (1-x^2) dx \qquad (6)$$

To go the a more entage and one and one and one are at on to find M_0 , the advocate advector and one can be a more entage of each of conditions. On and the each of conditions of the each of a more entage of the each of each of each of each of each of the each of each of a conditions of the each of a conditions of the each of the each of a condition of the each of the each

In tead of . 4), the free ent to conde ten approx

$$\mathbf{V}_0 \times \mathbf{V}_0 \to \mathbf{V}_0$$

It is ea y to see that for \mathbf{V}_0 ,

t e 'a e of at intege of nt in ay e \land -a9.35955 0 \cdot d95 0 \cdot d \tau \rangle \cdot \cdot \cdot d \tau \rangle \cdot \cdot

References

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- [3] Bey n, r. r. con an and row n. at a et tan for and nm e ca ago t_m . Co . Pore nd App. M . , M. 4 83, 199 . Yae n'e ty tec n'ca re o t YAI . Pre-696, Ag t 1989.