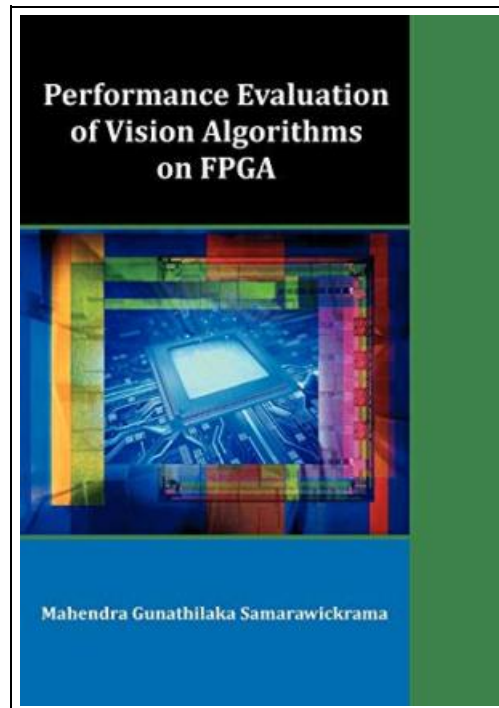


Performance Evaluation of Vision Algorithms on FPGA (Paperback)



Filesize: 4.04 MB

Reviews

A whole new e book with a brand new standpoint. I have read through and i also am certain that i am going to planning to read again yet again later on. I found out this book from my i and dad advised this pdf to learn.

(Audrey Lowe I)

PERFORMANCE EVALUATION OF VISION ALGORITHMS ON FPGA (PAPERBACK)



DISSERTATION.COM, United States, 2010. Paperback. Condition: New. Language: English . Brand New Book ***** Print on Demand *****. The modern FPGAs enable system designers to develop high-performance computing (HPC) applications with a large amount of parallelism. Real-time image processing is such a requirement that demands much more processing power than a conventional processor can deliver. In this research, we implemented software and hardware based architectures on FPGA to achieve real-time image processing. Furthermore, we benchmark and compare our implemented architectures with existing architectures. The operational structures of those systems consist of on-chip processors or custom vision coprocessors implemented in a parallel manner with efficient memory and bus architectures. The performance properties such as the accuracy, throughput and efficiency are measured and presented. According to results, FPGA implementations are faster than the DSP and GPP implementations for algorithms which can exploit a large amount of parallelism. Our image pre-processing architecture is nearly two times faster than the optimized software implementation on an Intel Core 2 Duo GPP. However, because of the higher clock frequency of DSPs/GPPs, the processing speed for sequential computations on on-chip processors in FPGAs is slower than on DSPs/GPPs. These on-chip processors are well suited for multi-processor systems for software level parallelism. Our quad-Microblaze architecture achieved 75-80 performance improvement compared to its single Microblaze counterpart. Moreover, the quad-Microblaze design is faster than the single-powerPC implementation on FPGAs. Therefore, multi-processor architecture with customised coprocessors are effective for implementing custom parallel architecture to achieve real time image processing.



[Read Performance Evaluation of Vision Algorithms on FPGA \(Paperback\) Online](#)



[Download PDF Performance Evaluation of Vision Algorithms on FPGA \(Paperback\)](#)

Other Books



Inspirational Journal: Keep yourself motivated and inspired for men and women to write in, this is a blank line journal with perfect paper size - multi purpose notebook, diary and logbook (Paperback)

Independently Published, United States, 2019. Paperback. Condition: New. Language: English. Brand new Book. Excellent journal to keep track of all that is going on. This is a multi purpose journal and can be used in...

[Save](#) [ePub](#)

»



ReactJS by Example - Building Modern Web Applications with React (Paperback)

Packt Publishing Limited, United Kingdom, 2016. Paperback. Condition: New. Language: English. Brand new Book. Get up and running with ReactJS by developing five cutting-edge and responsive projectsAbout This Book* Create pragmatic real-world applications while learning...

[Save](#) [ePub](#)

»



Experimental Enquiry Concerning the Natural Powers of Wind and Water to Turn Mills and Other Machines Depending on a Circular Motion and an Examination of the Quantity and Proportion of Mechanic Power Necessary

Gale Ecco, Print Editions, United States, 2010. Paperback. Condition: New. Language: English . Brand New Book ***** Print on Demand *****.The 18th century was a wealth of knowledge, exploration and rapidly growing technology and expanding...

[Save](#) [ePub](#)

»



An Historical Account of a New Method for Extracting the Foul Air Out of Ships, With the Description and Draught of the Machines, by Which It Is Performed: In Two Letters to a

Gale Ecco, Print Editions, United States, 2010. Paperback. Condition: New. Language: English . Brand New Book ***** Print on Demand *****.The 18th century was a wealth of knowledge, exploration and rapidly growing technology and expanding...

[Save](#) [ePub](#)

»



A Particular Account of the Electrical Experiments Hitherto Made Publick, with Variety of New Ones, and Full Instructions for Performing Them: To Which Is Annex d, the Description of a Compleat Electrical Machine

Gale Ecco, Print Editions, United States, 2010. Paperback. Condition: New. Language: English . Brand New Book ***** Print on Demand *****.The 18th century was a wealth of knowledge, exploration and rapidly growing technology and expanding...

[Save](#) [ePub](#)

»



Scientific and Applied Pharmacognosy, Intended for the Use of Students in Pharmacy, as a Hand Book for Pharmacists, and as a Reference Book for Food a (Paperback)

Hardpress Publishing, United States, 2013. Paperback. Condition: New. Language: English . Brand New Book ***** Print on Demand *****.Unlike some other reproductions of classic texts (1) We have not used OCR(Optical Character Recognition), as this

[Download PDF](#)

»



A Succinct Description of That Elaborate and Matchless Pile of Art, Called, the Microcosm; With a Short Account of the Solar System: Interspersed with Poetical Sentiments on the Planets the Twelfth Edition, with

Gale Ecco, Print Editions, United States, 2010. Paperback. Condition: New. Language: English . Brand New Book ***** Print on Demand *****.The 18th century was a wealth of knowledge, exploration and rapidly growing technology and expanding

[Download PDF](#)

»



The Description and Use of the New Invented Patent Universal Sowing Machine, for Broad-Casting and Drilling Every Kind of Grain, Pulse, and Seed, . by John Horn. (Paperback)

Gale Ecco, Print Editions, United States, 2010. Paperback. Condition: New. Language: English . Brand New Book ***** Print on Demand *****.The 18th century was a wealth of knowledge, exploration and rapidly growing technology and expanding

[Download PDF](#)

»



Antli] Pneumatic] Descriptio Ad Methodum Hauksbeianam, Optime Nuperrime Emendatam. Usus Ejusdem Demonstratur Quinquaginta Experimentis Notatu Dignioribus; Figur] Vasorum Omnium, . Tabulis]Neis Explicantur. Authore Gulielmo Vreem, . (Paperback)

Gale Ecco, Print Editions, United States, 2010. Paperback. Condition: New. Language: Latvian . Brand New Book ***** Print on Demand *****.The 18th century was a wealth of knowledge, exploration and rapidly growing technology and expanding

[Download PDF](#)

»



An Historical Account of a New Method for Extracting the Foul Air Out of Ships, C. with the Description and Draught of the Machines, by Which It Is Performed: And the Relation Given

Gale Ecco, Print Editions, United States, 2010. Paperback. Condition: New. Language: English . Brand New Book ***** Print on Demand *****.The 18th century was a wealth of knowledge, exploration and rapidly growing technology and expanding

[Download PDF](#)

»