



Institutional Sign In

Institutional Sign In

All



ADVANCED SEARCH

Conferences > 1995 IEEE International Confe... ?

# Toward parallel financial computation: valuation of mortgage-backed securities

**Publisher:** IEEE [Cite This](#) PDF

Yulin Yao ; J.F. Cheng ; P. Enny ; Duanyang Guo **All Authors**

**3** Cites in Patents **38** Full Text Views



## Alerts

Manage Content Alerts  
Add to Citation Alerts

### Abstract

Authors

References

Citations

Keywords

Metrics

More Like This



Down  
PDF

#### Abstract:

The valuations of complex financial instruments such as mortgage-backed securities and their derivatives in volatile interest rate environments are a vital part of risk m... **View more**

#### Metadata

##### Abstract:

The valuations of complex financial instruments such as mortgage-backed securities and their derivatives in volatile interest rate environments are a vital part of risk management and asset management. Since these valuations are computationally intensive, major financial institutions have turned to highly advanced supercomputers in search of better performance. The search has largely ignored a significant pool of computational power that is already widely available in these financial institutions-large networks of relatively low cost workstations that are lightly loaded or even idle for large periods of time. This paper presents a mortgage-backed securities valuation parallel architecture which consists of a pool of general purpose workstations using a message-passing mechanism. The experimental system is running in an environment consisting of up to 16 workstations. The processing time under a parallel processing scheme is significantly reduced.

**Published in:** 1995 IEEE International Conference on Systems, Man and Cybernetics. Intelligent Systems for the 21st Century

**Date of Conference:** 22-25 October 1995

**DOI:** 10.1109/ICSMC.1995.537930

**Date Added to IEEE Xplore:** 06 August 2002

**Publisher:** IEEE

---

Authors	▼
References	▼
Citations	▼
Keywords	▼
Metrics	▼

---

CHANGE  
USERNAME/PASSWORD

VIEW PURCHASED  
DOCUMENTS

COMMUNICATIONS  
PREFERENCES


US & CANADA: +1 800  
678 4333

PROFESSION AND  
EDUCATION

WORLDWIDE: +1 732  
981 0060

TECHNICAL INTERESTS

CONTACT & SUPPORT

[About IEEE Xplore](#) [Contact Us](#) [Help](#) [Accessibility](#) [Terms of Use](#) [Nondiscrimination Policy](#) [IEEE Ethics Reporting](#)   
[Sitemap](#) [IEEE Privacy Policy](#)

## IEEE Account

- » [Change Username/Password](#)
- » [Update Address](#)

## Purchase Details

- » [Payment Options](#)
- » [Order History](#)
- » [View Purchased Documents](#)

## Profile Information

- » [Communications Preferences](#)
- » [Profession and Education](#)
- » [Technical Interests](#)

## Need Help?

- » **US & Canada:** +1 800 678 4333
- » **Worldwide:** +1 732 981 0060
- » [Contact & Support](#)

[About IEEE Xplore](#) [Contact Us](#) [Help](#) [Accessibility](#) [Terms of Use](#) [Nondiscrimination Policy](#) [Sitemap](#) [Privacy & Opting Out of Cookies](#)

A not-for-profit organization, IEEE is the world's largest technical professional organization dedicated to advancing technology for the benefit of humanity.  
© Copyright 2024 IEEE - All rights reserved. Use of this web site signifies your agreement to the terms and conditions.