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Final Report  
Grant No. N00014-94-1-0010  
October 1, 1993 - September 30, 1994

**ELEVENTH IEEE WORKSHOP ON REAL-TIME OPERATING  
SYSTEMS AND SOFTWARE**

Submitted to:

Dr. Andre M. van Tilborg, Director  
Computer Science Division  
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Office of Naval Research  
800 North Quincy Street  
Arlington, VA 22217-5660

Submitted by:

Sang H. Son  
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Report No. UVA/525484/CS95/101  
July 1994

94-22452



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Charlottesville, VA 22903

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**School of Engineering and Applied Science**

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Justification .....	
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SEAS Report No. UVA/525484/CS95/101  
July 1994

Copy No. \_\_\_\_\_

# REPORT DOCUMENTATION PAGE

Form Approved  
OMB No. 0704-0188

Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Service, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

<b>1. AGENCY USE ONLY (Leave blank)</b>	<b>2. REPORT DATE</b> July 1994	<b>3. REPORT TYPE AND DATES COVERED</b> Final Report 10/1/93-9/30/94
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<b>4. TITLE AND SUBTITLE</b> Eleventh IEEE Workshop on Real-Time Operating Systems and Software	<b>5. FUNDING NUMBERS</b> N00014-94-1-0010
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<b>6. AUTHOR(S)</b> Sang H. Son	
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<b>7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)</b> University of Virginia Department of Computer Science Thornton Hall Charlottesville, VA 22903-2442	<b>8. PERFORMING ORGANIZATION REPORT NUMBER</b> UVA/525484/CS95/101
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<b>9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)</b> Office of Naval Research 800 N. Quincy Street Arlington, VA 22217-5660	<b>10. SPONSORING/MONITORING AGENCY REPORT NUMBER</b>
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**11. SUPPLEMENTARY NOTES**

<b>12a. DISTRIBUTION/AVAILABILITY STATEMENT</b>	<b>12b. DISTRIBUTION CODE</b>
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**13. ABSTRACT (Maximum 200 words)**

This workshop, held May 18-19, 1994 at the Holiday Inn Crowne Plaza, Seattle, Washington, was the eleventh in a continuing series of annual workshops on real-time operating systems and software. This workshop, co-sponsored by the IEEE Computer Society Technical Committee on Real-Time Systems and the Office of Naval Research, has accumulated a good tradition of unusually dense and substantial discussions on hot real-time issues, notably on problems and experiences in system design and development. Positions papers describing new ideas, promising approaches, experiences with practical and research systems, and work in progress were included in these areas:

- Real-time operating systems, including parallel and distributed systems and communication
- Real-time specifications for requirements and designs
- Real-time software systems and programming environments
- Real-time scheduling and resource management: experiments and practice
- Examples of current real-time systems

<b>14. SUBJECT TERMS</b> Real-time operating system, scheduling, programming environment, database, specification and analysis	<b>15. NUMBER OF PAGES</b>
	<b>16. PRICE CODE</b>

<b>17. SECURITY CLASSIFICATION OF REPORT</b> Unclassified	<b>18. SECURITY CLASSIFICATION OF THIS PAGE</b> Unclassified	<b>19. SECURITY CLASSIFICATION OF ABSTRACT</b> Unclassified	<b>20. LIMITATION OF ABSTRACT</b> Unlimited
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## **Final Report**

*Eleventh IEEE Workshop on Real-Time Operating Systems and Software*  
May 18-19, 1994  
Seattle, Washington

### **Abstract**

This workshop, held May 18-19, 1994 at the Holiday Inn Crowne Plaza, Seattle, Washington, was the eleventh in a continuing series of annual workshops on real-time operating systems and software. This workshop, co-sponsored by the IEEE Computer Society Technical Committee on Real-Time Systems and the Office of Naval Research, has accumulated a good tradition of unusually dense and substantial discussions on hot real-time issues, notably on problems and experiences in system design and development. Position papers describing new ideas, promising approaches, experiences with practical and research systems, and work in progress were included in these areas:

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- Real-time specifications for requirements and designs
- Real-time software systems and programming environments
- Real-time scheduling and resource management: experiments and practice
- Examples of current real-time systems

## **Report**

The program committee received submissions from 5 countries, representing 4 continents. Of the 42 submitted papers, 22 were selected for oral presentations. These papers cover a broad range of topics, including real-time systems, operating systems, scheduling approaches, real-time communications, timing analysis, concurrency control, applications, and formal methods.

Nearly 60 participants were in attendance. Three panel discussions including internationally recognized leaders in scheduling, real-time education and real-time benchmarks took place.

The 117-page proceedings, published by IEEE, were distributed to the participants and sent to leading researchers working in this field. The program committee consisted of the Chair, Alan Shaw, University of Washington; Ted Baker, Florida State University; Stuart Faulk, SPC; Mike Jones, Microsoft; Luqi, Naval Postgraduate School; Keith Marzullo, University of California at San Diego; Karsten Schwan, Georgia Tech; Hide Tokuda, Carnegie Mellon University; and Wei Zhao, Texas A&M University.

Ted Barker, Florida State University, was elected as the General Chair and Wei Zhao, Texas A&M, as the Program Chair for the Twelfth IEEE Workshop on Real-Time Operating Systems which is tentatively scheduled to be held in Houston, Texas on May 10-11, 1995.

**Sang H. Son  
General Chair**

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