

March 1996

Rock River Valley Section

Established 1947



The Institute of Electrical and Electronic Engineers, Inc.

RRV Section & C/CS Chapter Meeting

S/W Spec & Design: A Disciplined Approach For RT

When Thursday, March 28, 1996

Where Rock Valley College, Technology Center, Room 117. Enter from Mulford, just north of Springbrook Rd.

Agenda 6:00 PM Social Hour/Tours
6:30 PM Dinner - Buffet
7:30 PM Presentation

Speaker Ken Shumate, Senior Software Engineering Manager, Hughes Aircraft Company

Program Ken will present an overview of a set of methods for the specification of software and its top-level design; there is special emphasis on the transition from the specification to the design. The presentation is equally suitable for software and systems engineering audiences.

Many texts and presentations focus on the front-end portions of system development; others have an emphasis on the software design. This presentation addresses the full spectrum of software specification and design in the context of the construction of large hardware/software systems with significant interaction between systems and software engineering. The disciplined approach underlying the specification and design methods provides lessons for the successful management of projects; it can provide a technical foundation for high levels of process maturity consistent with the model advanced by the Software Engineering Institute, and under development by the National Council on Systems Engineering.

An important part of the presentation is the explicit consideration of the transition from requirements to design. That

is, what goes on, or should go on, in the designer's mind during the process of solution (the design) of the problem (the specification). This portion of the presentation discusses how the software specification may be influenced by object-oriented concepts in order to smooth the creation of the design, and how an object-oriented design results from the combination of specification and design methods.

Biography Ken is responsible both for the Software Engineering Division's research and development efforts and for major systems in the areas of air traffic control and shipboard command and control. He received a BSME from University of Kansas in 1966 and a M.S. in Operations Research from U.S. Naval Postgraduate School in 1971. Ken has over 20 years in the computer field, with experience as programmer, technical lead, and manager of a number of real-time systems development projects in Ada and other languages. He has also had the opportunity for extensive consulting in the United States and Europe with clients such as Motorola, Unisys, General Electric, Boeing, Westinghouse, and Thomson CSF. His many publications include the

books *Understanding Ada: with Abstract Data Types (2nd Edition)*, *Understanding Concurrency in Ada*, *Designing Large Real-time Systems with Ada*, and the newly released *Software Specification and Design: a Disciplined Approach for Real-Time Systems*. He has taught management, technical introductory, and advanced courses based on these books. Ken has been closely associated with the Ada program since 1979, and has been teaching Ada since 1981.

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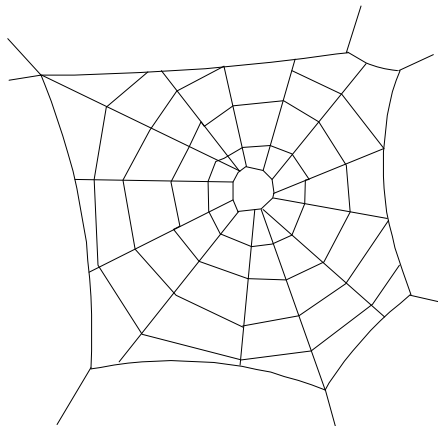
Door Prizes Sponsored by RRVS and Best Buy

Meal Dinner will be buffet style (with a minimum of 15 people) featuring Chicken and Ham or Roast Beef. Please make your **dinner reservations** by calling **Gloria** at **815-226-5247** by **Monday, February 26**. The cost of the dinner is **\$4.00** for **IEEE members** and **\$10.00** for **non-members**. Unemployed members may call one of the officers for special arrangements.

Note The meeting is open to the general public and the presentation portion is free. You need not be an IEEE member. However, please call to enable us to make proper arrangements.

February Meeting Recap

Jeff Arnst, an expert on the use of web technology for improving the flow of



information within a company, of Intranet Architects presented "Web Page Technology and Your Business". Jeff reviewed the current web page authoring tools and search engines that facilitate finding information in the vast repositories of company data. He discussed good web page design practices, and in general, provided a wealth of insight regarding using this very hot technology. Jeff discussed the role that Java and Virtual Reality Markup Language (VRML) will play in the near future. For anyone interested in continuing with further discussions with Jeff, he can be reached at 408-996-2461 or e-mail at jeff@arnst.com.

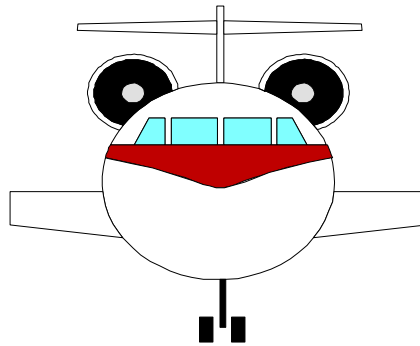
Event Sense Now Downloadable From RRVS WWW Home Page

Anyone can now download the current or past issues of *Event Sense* for 1996 up to a week earlier than availability via US Mail. Please see page 3's officer contact information for the RRVS WWW Home Page URL address.

Chicago/Rockford Consultants Network To Meet In March

The next Consultants Network meeting will be on Monday, March 25, 1996, at 7:30pm at the Palatine Public Library. You may contact Dr. Gary Blank at 847-464-4006 for further information.

April Tour Preview



Our April 25 tour will take us to the Chicago O'Hare Data & Communications Facilities. We will **depart** Rockford about **3pm**. The tour will start at 5:30pm and last roughly 2 hours. Details of parking areas to use and other pertinent information will be provided as it becomes available. Sign up for the tour as early as you can committ. We can work out ride sharing once we know the number of people.

Other Meetings Of Interest

- NTU @ Rock Valley College (reservations: Delores Ford at 815-654-5505)
- Advanced VHDL Topics: Top-Down Design Methodologies, March 29, 10am-4pm
- VHDL for Description, Design and Synthesis of CPU Structures, April 15, 10am-4pm
- IEEE Chicago Section/Chapter Meetings:
 - Technical Panel Discussion on "Software Patterns", March 28, 1-4pm, Univ. of Illinois at Chicago, Science and Eng. Office, Rm 1000 (10th floor), 851 S. Morgan St., Chicago; reservations: Dr. Weider Yu at 708-224-4511.
 - Seminar on Flexible Circuits: Materials and Design, March 29, 12:30-5pm, Motorola Galvin Center Auditorium, Algonquin and Meecham Roads, Schaumburg; reservations: Elizabeth Garbacki at 708-527-2636.

In Search of RRVS Memorabilia

In March of 1997 your Rock River Valley Section will celebrate its golden jubilee - fifty years as a section. Help us commemorate this momentous occasion by sharing your memories with us. If you are aware of significant events such as seminars, conferences or awards sponsored by our section or honors given to members or have photographs, newsletters, and /or historical information please share them with us. **Contact Larry Wachowiak at 394-5676, fax at 394-2497, or e-mail at l.wachowiak@ieee.org.** We plan to share these items with all of our

Members -- Use the IEEE Professional Assistance Network

We offer unemployed members an opportunity to run a *free* position wanted ad in the *Event Sense*. Write your own ad and e-mail or FAX it to the *Event Sense* editor. Your ad will appear in the next available issue. Job ad guidelines: RRVS members only; less than 60 words; typed.

Reminder -- Just The FAX

Have the *Event Sense* faxed to you for early, efficient delivery. Send your fax number, along with appropriate routing information, to the *Event Sense* editor.

Submissions to Event Sense

Send articles and job ads to the *Event Sense* editor, Bob Parro, via e-mail (preferred) or fax. Job ads will run for two consecutive months. Contact the *Event Sense* editor if the ad needs to run longer. Please make submissions by the twenty-fifth of the month. All submissions are subject to editing for style, clarity, and space considerations.

e-mail: **b.parro@ieee.org**

Candidates For Office Of The RRVS Executive Committee For The 1996-1997 Term

The Nominating Committee offers the following candidates for your consideration:

RRVS Executive Officers

Chair Bob Parro
 Vice Chair .. Bill Barber
 Treasurer ... Larry Wachowiak
 Secretary ... Mark Harris

Additional nominees can be submitted by petition from the



Bob Parro



Bill Barber

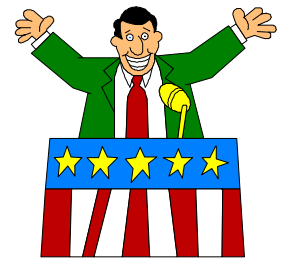


Larry Wachowiak



Mark Harris

section membership. A potential nominee must be an I E E E member in good standing and a member of the RRVS. A petition must be signed by at least 20 current RRVS members. Deadline for petitions is April 25. Please submit petitions to Matt Zimmer (see contact info on page 3). The election is planned to be held at the May 30 section meeting.



The Rock River Valley Section would like to give recognition to the following area companies and university for supporting Section Officers:

Sundstrand Corporation • 3C Computer Systems • William Barber & Associates • Northern Illinois

Rock River Valley Section of the IEEE 1995-1996

[WWW: <http://www.ceet.niu.edu/orgs/rr-ieee/rrvs.htm>]

Elected Executive Committee

Chair	Bob Parro	b.parro@ieee.org	(815) 394-2947
Past Chair	Caio Ferreira	c.ferreira@ieee.org	(815) 394-2903
Vice Chair	Bill Barber	b.barber@ieee.org	(815) 235-4110
Secretary	Mark Harris	m.harris@ieee.org	(815) 226-6098
Treasurer	Larry Wachowiak	l.wachowiak@ieee.org	(815) 394-5676

Appointed Executive Committee Chairs

IAS Chapter Chair	Hassan Mansir	h.mansir@ieee.org	(815) 226-6875
IAS Vice Chair	Matt Zimmer	m.zimmer@ieee.org	(815) 394-3456
Comp/CS Chapter Chair	Paul Peterson	paul.peterson@ieee.org	(815) 394-2584
Nominations	Matt Zimmer	m.zimmer@ieee.org	(815) 394-3456
Educational Activities	Roger Caruana	r.caruana@ieee.org	(815) 332-4606
Technical Activities	Roger Caruana	r.caruana@ieee.org	(815) 332-4606
Membership	Bill Barber	b.barber@ieee.org	(815) 235-4110
Awards	Paul Peterson	paul.peterson@ieee.org	(815) 394-2584
Publicity, Newsletter Editor	Bob Parro	b.parro@ieee.org	(815) 394-2947
RRVS Jubilee	Larry Wachowiak	l.wachowiak@ieee.org	(815) 394-5676

Northern Illinois University - Student Branch Officers

St Br Counselor	Prof. Don Zinger	d.zinger@ieee.org	(815) 753-0540
St Br President	Mike Park		
St Br Vice President	Todd Placher		
St Br Secretary	Mel Saldeen		
St Br Treasurer	Bob Selepa		

Messages for student officers can be left at the NIU Dept of Electrical Engineering, (815) 753-9974 or e-mail at sb.niu@ieee.org



Rock River Valley Sectio

Established 1947

March Section Meeting

March 28

Software Specification and Design: A Disciplined Approach for Real-Time Systems

April Section Meeting

April 25

Tour of Chicago O'Hare Data & Communications Facilities - NOTE: 3:00PM DEPARTURE TIME

May Section Meeting

May 30

Annual RRVS Officer Elections and Section Picnic



IEEE



Joint Computer/Control Systems
Society Chapter

Established 1995



Industry Applications
Society Chapter

Established 1992

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