



Worcester County IEEE

Newsletter

January

1995

Worcester Section

Borland's dBase For Windows and ReportSmith

Peter Marquez, Borland International

Monday, January 9, 1995 at 7:00 in Kennicutt Hall, WPI, Worcester

The advantages and features of dBase For Windows, a true object oriented database product for the PC platform. ReportSmith, a database reporting and query tool, will also be demonstrated.

Worcester Section - PACE - Internet Subsection

InnerCircle's SuperNova Online and Internet Service

Peter Bohush, InnerCircle Technologies

Thursday, January 19, 1995 at 7:00 PM, Call for Location

InnerCircle Technologies will describe and demonstrate their recently announced SuperNova Internet access service.

Annual Joint Meeting of the Worcester Section and ASME

Current Developments and Future Aspects of Electric Vehicles and Associated Infrastructure

David Dilts, Boston Edison

Wednesday, February 8, 1995 - 6:30/7:00, Speaker at 8:00 PM, WPI, Worcester

The current status of electric vehicle demonstration projects in Massachusetts and California as well as the technological developments which might produce some fundamental changes in the industry.

Worcester Section

Apple Computer: Macintosh - Telephone Integration

Thomas Barrieau, Apple Computer

Monday, February 13, 1995 at 7:00 in Kennicutt Hall, WPI, Worcester

Apple's Computer- Telephone Integration (CTI) architecture and how you easily integrate telephone technology and the Macintosh. Demonstrations will include using the Mac to send and receive faxes, take voicemail, and act as a speakerphone.

Computer Society/NESQC

A Holistic View of Software Engineering

Johanna Rothman, The Rothman Consulting Group

Wednesday, February 15, 1994 at 6:00 PM, Quantum, Shrewsbury

Is there a difference in development, testing, and writing activities? Is there a better way to organize for high quality product development? Who "owns" the tools, methodology, and process issues?

Worcester Section - PACE - Internet Subsection

IBM OS/2 WARP Connectivity And The Internet

Mark McNamara, IBM

Thursday, February 16, 1995 at 7:00 PM, DEC (SHR3), Shrewsbury

The new connectivity features and future directions of IBM's desktop operating system and connectivity strategy. Beginner and advanced, hands-on Internet workshops are held between 6:30 and 7:00.

THE PACE PAGE

Engineers and the Global Economy

The following presentation is an excerpt from the speech "Engineers and Employment in the Global Economy: A View from Capitol Hill" by Edith Holleman, Counsel of the Science, Space and Technology Committee of the U.S. House of Representatives at the September 3, 1994 PACE conference. Subsequent newsletters will contain the balance of her address to the PACE conference.

Thank you so much for inviting me to address your conference. I am speaking today, not as a representative of Congress, but as an observer of administration and Congressional policies that affect global employment. These policies impact your jobs, your future, your standard of living and those of your children. They raise many questions. I have no definite answers, but want to pose some possibilities for you to think about and begin to discuss.

A cartoon appeared in the newspaper this spring that pictured a new college graduate being handed a spatula by the college president who said, "Go forth and serve mankind." That cartoon summarizes much of what we know about the present American economy, and the college graduate could just as well have been a 50-year-old engineer.

The questions we must address are three: First, can we maintain our national standard of living in a global economy where there are hundreds of people for every job? Second: What are our policymakers doing to plan for the economic future of our citizens? Finally, what can we do to insure good employment opportunities?

I am going to give you the quick answers based on today's economic policies: 1. We cannot maintain our standard of living. 2. The policymakers are doing little or no planning. 3. We must demand a complete shift in economic policy.

The end of the Cold War, the globalization of the economy as exemplified by the North American Free Trade Agreement (NAFTA) and the General Agreement on Tariffs and Trade (GATT), the continuing advance of automation and information technologies and the relentless downsizing of corporations are affecting employment as never before. These are not job-creating events. Computer-aided design systems help our engineers do the job 6 - 12 did two decades ago. A Cummins Engine factory in Indiana has a new, team workplace where a smaller number of workers make \$8 per hour, about half of what the previous workforce made. People talk about the eeriness of factory floors because of the small number of workers.

Information technology has facilitated the elimination of a whole layer of management. You all know how risky it is to have obtained membership in the "50-50 Club". That means 50 years old with a salary of over \$50,000 — in other words, a mid-manager. In their relentless drive for higher profits, multinationals compete with each other to eliminate these mid-managers and others. In the first quarter of this year, these companies eliminated 192,572 jobs, or 3,106 every day — mostly in the communications, aerospace, computer, transportation and retail industries. Many more jobs were eliminated by smaller companies.

Announcements of job cuts and management restructuring are inevitably rewarded with stock price surges the next day on the Dow Jones. Earlier this month, the Wall Street Journal (8/1/94) reported that major companies increased after-tax earnings 39% over last year. Those that did best contained costs. " Heavy investments in technology and years of restructuring have resulted in 'relatively low unit labor costs and profit-margin improvement.'"

It is a different story, however, for those who get laid off. When they get rehired, it is for lower salaries, fewer benefits and less security. And this is a worldwide phenomena, extending even to companies in the developing world which hope to compete in the new world market.

InnerCircle's SuperNova Online and Internet Service

Peter Bohush, InnerCircle Technologies

InnerCircle Technologies will describe and demonstrate their recently announced SuperNova service. SuperNova includes full Internet access with SLP, PPP, Telenet FTP, WWW, etc., in addition to the on-line, interactive NovaLink service. Peter Bohush, InnerCircle Technologies, will explain the advantages and benefits of on-line services and Internet access for entertainment, business and information. Beginner and advanced, hands-on Internet workshops are held between 6:30 and 7:00.

For location, directions, and more information call Al Reinhart, DisCom Systems at 508/869- 6417.

IBM OS/2 WARP Connectivity And The Internet

Mark McNamara, IBM

Announced in October, OS/2 WARP enhancements include multi-threaded, 32-bit power in 4 megabyte systems, wide

area network connectivity, and built-in, on-line access to the Internet: Gopher, World Wide Web, Telenet, FTP, E-Mail, etc.. Mark McNamara from IBM will demonstrate the new connectivity features, and outline future directions of IBM's desktop operating system and connectivity strategy. Beginner and advanced, hands-on Internet workshops are held between 6:30 and 7:00.

This meeting, is at 7:00 on Thursday, February 16, 1995 in Digital Equipment Corporation (SHR3), Shrewsbury, MA. For more information call Al Reinhart, DisCom Systems at 508/869-6417.

Borland's dBase For Windows and ReportSmith

Peter Marquez, Borland International

Peter Marquez of Borland International will describe the advantages and features of dBase For Windows, a true object oriented database product for the PC platform. The advanced, user friendly, graphical interface for data management, querying, reporting and form development will be demonstrated. The drag and drop, visual interface of ReportSmith, a database reporting and query tool, will also be demonstrated. Marquez will discuss Borland's direction and commitment to enterprise solutions, and client/server tools and applications.

This meeting, sponsored by the Worcester Section, will be held on Monday, January 9, 1995 at 7:00 PM in Kennicutt Hall, Salisbury Labs, Worcester Polytechnic Institute, Worcester, MA. For more information call Al Reinhart, DisCom Systems at 508/869-6417.

A Holistic View of Software Engineering

Johanna Rothman

There are a number of software organizations in which the lines between development, SQA, and documentation are becoming more blurred. The developers write code and unit tests, the SQA engineers write system tests and code review the product code, and the writers develop on-line help, possibly in a markup language or conditionally viewed. In all cases, the people who have a hand in producing the product develop, document, and test the product as a whole.

This talk will address these questions:

- Is there a difference in development, testing, and writing activities?
- Is there a better way to organize for high quality product development?
- Who "owns" the tools, methodology, and process issues in these organizations?

Johanna Rothman has over 17 years of experience in the areas of software engineering, software management,

and software process improvement. She is an expert in the areas of software process, software development, software quality assurance, and software program management. Ms. Rothman has managed software engineers, and a large variety of projects and programs ranging from 6 person-months to 120 person-years. She is a CQA, and has used her audit and process experience to assist a number of companies in changing their software processes to produce more-featured software which works and ships on time.

This meeting of the New England Software Quality Council sponsored by the Computer Society of the Worcester Section of the IEEE, is scheduled for Wednesday, February 15, 1994, at Quantum Corporation, formerly Digital Equipment Corporation's Northeast Technology Center (SHR1), 333 South Street in Shrewsbury. The meeting will start at 6:00 PM and will end at 7:30 PM. Make a left onto South St. from Route 9 West (near Fretters) which is about 5 miles West of Rt. 495, then left to Quantum Corporation. For more information call Ric Perron at (508) 770-6371 or Jim Perry at (617) 455-4560.

Apple Computer: Macintosh - Telephone Integration

Thomas Barrieau, Apple Computer

While the telephone and the computer are two of the most widely used tools in business today, connecting the two has never been easy. At this month's meeting Thomas Barrieau, Apple Computer will discuss Apple's Computer- Telephone Integration (CTI) architecture and how you easily integrate telephone technology and the Macintosh. Demonstrations will include using the Mac to send and receive faxes, take voicemail, and act as a speakerphone.

This meeting, sponsored by the Worcester Section, is at 7:00 PM on Monday, February 13, 1995 in Kennicutt Hall, Salisbury Labs, Worcester Polytechnic Institute, Worcester, MA. For more information call Al Reinhart, DisCom Systems at 508/869- 6417.

Current Developments and Future Aspects of Electric Vehicles and Associated Infrastructure

David Dilts, Boston Edison

The annual joint dinner meeting of the IEEE and ASME will be held on February 8, 1995 on the campus of Worcester Polytechnic Institute. The optional dinner will be held at the Higgins House and the presentation will be at the Perreault Lecture Hall.

A social period will precede dinner at 6:30 p.m. Dinner (choice of chicken or fish, cost \$15) will be served at 7 p.m.

the speaker will begin at 8 p.m. For further information and reservations call: Annette Aubertine (508) 831-5425.

The title of this year's presentation is "Current Developments and Future Aspects of Electric Vehicles and Associated Infrastructure", and will be given by an outstanding individual who has featured prominently in the current development of electric vehicles.

David Dilts is a mechanical engineer, with diverse design and management experience in photovoltaic/semiconductor devices, automated production machinery, plastic molding and extrusions, composites, alternative transportation fuels, and electric vehicles. He has been the manager of Clean Fuel Technology programs for the Massachusetts Division of Energy Resources and is currently the Electric Vehicle Product manager for Boston Edison. Mr. Dilts has a B.S.M.E. from Clarkson University and holds four U.S. patents in photovoltaic technology.

The speaker will discuss the current status of electric vehicle demonstration projects in Massachusetts and California as well as the technological developments which might produce some fundamental changes in the industry.

He will further elaborate on the infrastructure requirements and what is being done to implement them. Progress of vehicle manufacturers will be reviewed, with emphasis on the developments at Solectria.

The meeting will be held in the Perreault Lecture Hall in the Perreault building on the WPI campus. Dinner will be held in the Higgins House on the WPI campus. Higgins House is located on the northwest part of the campus, off Salisbury street. There is no parking at Higgins House, please park on West street or in the area.

From I-290 northbound, take the Belmont St./Lincoln Square exit (Exit 17), and turn left, follow thru WPI campus. At intersection with Salisbury, turn left, the first left is the entrance into Higgins House.

From I-290 southbound, take Exit 18, bear right at the end of the ramp, then take the next right, proceed straight,

merging with Salisbury Street. Continue west on Salisbury until the WPI campus is on the left, parking may be found on Salisbury street or West street. The entrance to Higgins House is the first left after West street.

Electro International '95

Boston, Massachusetts, December 21, 1994 — The Board of Directors of The Electro International trade show and conference announced that the 1995 event will be held here on June 21 - 23. The scope of the upcoming trade show will include major emphases on surface mount technology and contract manufacturing.

Electro International, jointly sponsored by the IEEE and the ERA (Electrical Representatives Association), will be held in the Hynes Convention Center.

Electro '95 attendance will be drawn from the electronics engineering and manufacturing communities, as well as technical management. Conference sessions will address advancements in the field of electronics engineering and manufacturing. The keynote speaker will be announced shortly.

For further information about Electro International '95, please contact Kathryn Piersall at 214-419-7969 or Paul Baudisch at 617-444-5543.

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