

IEEE Student 2 Newsletter

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Exposing Yourself to Industry

John Fitzsimmons, Manager of a new product development for a modest sized company on the West Coast which manufactures air and water quality measuring instruments, is one example of the kind of personalized industrial assistance and interaction available to IEEE Student members and Branches. John was contacted by a Branch through the local IEEE Section and asked if he and several other engineers or technical personnel at his company would be willing to spend a day with several engineering or technology students participating in their "Day with an Engineer" program. The purpose of the program, as they explained, is to provide students with realistic perspectives of the industry or field in which they later hope to be employed. The "Day with an Engineer" program has achieved this objective for hundreds of students since first begun about two years ago.

Students who have participated in the program several times during their last two years of school have observed a number of different aspects of industry. Participants without any prior industrial experience have indicated that they approach employment interviews with considerably more knowledge and a renewed sense of confidence in themselves after having spent one or more days with an engineer in a "real life" industry situation. Organizational responsibility for the program lies with individual Student Branches, or jointly between Branches, with the assistance of the local Section Student Activities Committee.

If you would like more information on the "Day with an Engineer" program or plan to organize one on your campus, write to Bob Asdal at IEEE Headquarters. Launch your career from a solid foundation ... explore what industry has to offer ... spend a "Day with an Engineer".

Summer Employment - Start Planning Now

Although summer may seem far away, now is the time to line up a good summer job for 1975. All economic barometers point toward a difficult year ahead, and competition for meaningful summer jobs is bound to be keen.

College placement offices often have listings of available summer jobs and they are a good place to begin your search. Resources such as the College Placement Annual, Engineering Opportunities, the Occupational Outlook Handbook, Summer Employment Guide, Summer Job Directory, and The World-Wide Summer Placement Directory should be investigated for summer employment possibilities. The U.S. Civil Service Commission is seeking to fill a number of summer jobs with Federal agencies. CSC Announcement No. 414 lists openings and gives instructions for filing: the application deadline is January 17. Keep your name in circulation: remind friends and family, professors, and IEEE members in your local Section of your interest in finding a summer job. Above all, start a letter writing and door knocking campaign as soon as possible to beat the competition.

Mass Media Training

Under a new program recently announced by the American Association for the Advancement of Science, up to ten outstanding advanced graduate students in the social and natural sciences will be supported as intern reporters, researchers, or production assistants in a variety of media for the summer of 1975. In a few exceptional cases, junior, senior, or postdoctoral candidates will be considered.

Students will work for newspapers and general-interest magazines, as well as television and radio stations, directed towards the public at large. This on-the-job training will provide the participants with an opportunity to improve their communication skills and help them to understand the requirements and responsibilities of editorial decision making. Salaries will be paid by the AAAS at a level based on the present rate for journalism interns in the participating media. In 1973, this rate was \$180 a week. The AAAS also pays the interns' travel expenses.

For further information and details on how to apply write to: Wendy Weisman-Dermer, Mass Media Intern Program, American Association for the Advancement of Science, 1776 Massachusetts Avenue, NW, Washington, D. C. 20036. The application deadline for this program is February 1.

Engineers Week engineering

February 16 through 22 has been designated National Engineers Week in the United States. The theme this year is ENGINEERING: EXPLORING NEW ENERGY FRONTIERS.

Programs are being organized across the country in response to this annual event. Public exhibits and displays, recognition of outstanding engineers, meetings on the theme topic, college-level career conferences, science teacher workshops, high school "Day with an Engineer" programs, official proclamations, and extensive press coverage are all planned during the week. IEEE Student Branches and Sections are urged to "get into the limelight" and participate in National Engineers Week.

A special kit, produced by the National Society of Professional Engineers, is available to interested Branches from Marty Gitten, Manager of Internal Communications at IEEE Headquarters.

engineering

HAM Net Moves

Effective January 13, 1975, the North American IEEE Student HAM Net will begin operations on the 20 meter band. On the second and fourth Mondays of each month, the Net will operate at 14,325 \pm 5 KHz for one hour starting at 2100 Z Hours. This change will extend the operational range of the Net and allow for participation by general class licence holders. The Net will continue operating on the 80 meter band for closer range coverage. Operations on the 80 meters will be at 3,985 \pm 5 KHz for one hour starting at 0300 Z Hours (Tuesday). Put the Net on your calendar and tune in for the next session - it's a great way to meet other IEEE members, exchange ideas and information and develop lasting "on-the-air" friendships.

Ed Fuller, Student Communications Officer at the University of Arkansas Student Branch (W5YM) who has been a prime mover behind the NET, reported the first known Branch-to-Branch contact. On September 23, at 9:14pm CDT, Ed reached Dave Gent, the Student Branch Chairman at Texas A&M University (W5AC), for the first Network communications between two Branches. Our congratulations to Ed and Dave for this "golden spike" achievement.

We'd like HAMS across the United States and Canada to join in the next Network session. Join us on January 13th, make it a New Year's resolution!

New Avionics Award

A new Student award recently established by the Radio Technical Commission for Aeronautics recognizes an outstanding college student for work accomplished in the field of Avionics Systems Engineering and encourages worldwide expansion of this activity. To qualify, a student may be enrolled full or part time, must be under 30 years of age, and may be at the B.S., M.S., or Doctorate level. Any paper, project, report, or thesis submitted will be judged solely on the basis of technical merit.

The award was established in memory of William E. Jackson (1904-1972) the internationally known and highly regarded electronics engineer who was largely responsible for the establishment of the initial National Aviation System. His other contributions spanned instrument landing systems, vhf omni ranges, and distance measuring equipment. A Fellow of IEEE, Bill Jackson was particularly interested in assisting young engineers. His advice, counsel, and assistance provided lasting inspiration to many engineering students.

The award will carry a \$1000 minimum honorarium and be made at each RTCA Annual Assembly, beginning in 1975. For more information, contact: Radio Technical Commission for Aeronautics, 1717 H Street, NW, Washington, D. C. 20006. Tel. 202-296-0484.

Selling Yourself ... Softly

Anyway you look at it finding a job requires a talent in selling yourself. Techniques on how to effectively "sell yourself" are but one of the many topics covered in a series of three Student Employment Workshop guides recently published by the Student Services Department of IEEE.

Although finding a job is basically a do-it-yourself task learning the fundamental concepts and techniques that apply need not be so. Student Employment Workshops are structured as a self-help program where groups of 6 to 8 Students essentially teach themselves letter and resume writing, and the development of effective interviewing techniques by sharing their ideas and experiences, under the guidance of a group leader.

The need for such a Workshop grew from the depressed job market several years ago - but the ideas and techniques that are covered apply equally to times of better employment and can, as a matter of fact, be put to use throughout one's entire career. If you are interested in organizing a program or would simply like a copy of "How to Organize a Student Employment Workshop", the "Instructor Handbook", or "Student Handbook", write to Bob Asdal at IEEE Headquarters with your request.

Energy Resource Alternative

Student teams from colleges and universities in North America will be developing innovative energy conversion and power generating systems using wind, sun, synthetic gas, and other alternative energy sources for the 1974-1975 Energy Resource Alternatives (ERA) competition. Sponsored by SCORE, Student Competitions on Relevant Engineering, this year's competition should attract even more participation than in the past. In 1971 and 1972 SCORE sponsored the Urban Vehicle Design Competition and attracted participation by over 3200 students from 80 different colleges and universities. The University of British Columbia won top entry in the UVDC contest while Penn State, in the following year, won the Grand Award in the Students Against Fires competition.

IEEE Student members should be particularly interested in participating with other engineering students on campus in the ERA competition. Besides the challenge afforded by the competition, many schools are offering credit for participation in SCORE projects. At a meeting held October 18-20 at the University of Texas at Arlington, leading experts discussed the state of the art alternative energy technology and the areas most open to innovation: a proceedings of that meeting will soon be available.

The Energy Resources Alternative Competition will be judged in August 1975 so there is still time to submit a proposal and begin work. Funding on the basis of project quality and nature of design is available from SCORE to ERA design teams. Interested? Write to ERA Coordinating Committee, College of Engineering, University of Wisconsin, Madison, Wisconsin 53705. Tel. 608-262-2173.

SAC Student Input

Over the past several years IEEE Student members have received and exercised an increasingly more important role in governing Institute Affairs. For example, a Student representative from each of the seven North American Regions is appointed by the Regional Director to serve on the Student Activities Committee (SAC) as a counterpart to a Regional SAC Chairman who is a faculty member selected from the Counselors of that Region. At the most recent SAC meeting, held on November 11 at Arizona State University in Tempe, the contributions of Student members, who collectively form the Student Policy and Planning Committee was positively felt.

One action of the Student Activities Committee was to recommend a Bylaw change that would give Student members a formal role in the selection of Branch Counselors. The new Bylaw would require that appointments be made "by the Regional Director upon the recommendation of the Student members of the Branch, the Regional SAC Chairman, and with the approval of the Department Head at the educational institution involved."

The Student Activities Committee has as its main responsibility deciding policy and program matters of concern and interest to IEEE Student members. Members of the Committee are always interested in hearing from IEEE Student members and Branches about new educational or professional programs that would be of interest and service to the entire membership.

For a Job Well Done ...

Dr. Harry P. Weber, Dean of Science and engineering at Florida Institute of Technology and outgoing SAC Chairman, was recently acknowledged by the Regional Activities Board for "the fine work that he and other members of the Student Activities Committee have done over the past two years."

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The Editor welcomes contributions from Student Branches, Student Members, IEEE Organizational units, and other sources. Editor: Robert K. Asdal.



Meeting Wrap Up!

Why is this group smiling? The truth, if you're curious to know, is that the Students have just completed a day-long meeting, including a Workshop and training session, on how to run a Student Branch. Pictured here are the Student Branch Chairmen, and members of their Executive Committees, who attended the Upper New York State meeting of Counselors and Student Branch Chairmen in early October.

Across the United States and Canada, similar meetings are held each Fall and Spring to allow Counselors and Student Chairmen, who are responsible for running our 430 Student Branches, to meet and exchange ideas and benefit from each others experiences. Leadership experience developed through this type of activity is one of the less tangible, but certainly rewarding real, benefits of IEEE membership.

To our dedicated Counselors and Student Branch Officers, we owe a debt of gratitude. Attend the next IEEE meeting on your campus ... let's show 'um how you love 'um!

SPECTRUM Highlights

SPECTRUM in January is devoted to a review of today's technology, placing emphasis on existing hardware and software, with a look ahead to probable trends in 1975.

Scan the issue to see what's happening in industrial electronics, sociotechnology, components and devices, computer systems, communications and microwaves, biomedical engineering, power and energy, transportation, instrumentation, and military and aerospace.

SPECTRUM ... the pulse of the profession ... is worth keeping tabs on, you'll find there is nothing like it!