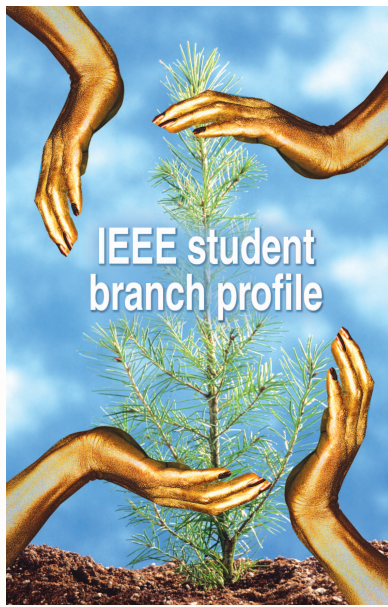


There are tales aplenty of just formed IEEE Student Branches (SB) occupying basements, cluttered classrooms, or high traffic university student centers, just trying to eke out an existence among the bevy of college clubs and activities. For the University of Victoria (UVic), British Columbia, IEEE Student Branch, there was not so much eking as there was completing. Founded approximately 20 years ago, UVic secured an office early on, complete with a library of current journals and books, and participated in IEEE student design competitions. Over the years, with the co-op nature of the engineering program at UVic, continuity and student involvement became difficult to maintain. The growth in the engineering faculty at UVic resulted in the demand for space outpacing supply. As a result, the SB office was appropriated for other purposes.

Rather than retreat to a nearby basement, students worked to generate additional interest in the SB. As the Department of Electrical and Computer Engineering grew, membership in the IEEE among students increased over time and currently stands at 93 members. A new demand for an IEEE SB office had arisen.

In 2006, SB executives Susan Perkins and Patrick McKnight approached the dean of engineering and were granted a generous-sized room for a new IEEE Student Branch office. It was soon followed by an



All for McNaughton

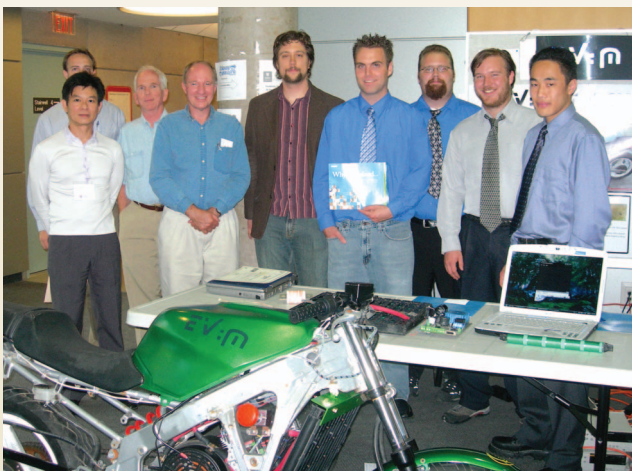
CRAIG CAUSER

IEEE Canada McNaughton Centre Grant that assisted in the setting up of the new McNaughton Learning Resource Centre in the IEEE Student Branch at the UVic Faculty of Engineering.

“After several planning meetings and consultations with faculty, staff, industry professionals, and students, we requested space in the engineering building,” recalls Susan Perkins, Region 7 Women in Engineering coordinator, GOLD Member, and past chair of the SB. “The dean of engineering granted us a large space in the Engineering Lab Wing in June 2006—the opening of the computer science and engineering building at UVic had freed some space, which had up until then been too cramped to allow us our own office. The executives of the IEEE Student Branch—well, me, Ron Desmarais, and Pat McKnight—then put together a proposal for a McNaughton Centre grant and sent it to the IEEE Canadian Foundation in order to acquire funding for a small amount of technical equipment for our lab. They granted us CDN\$3,000, an amount matched by the Victoria IEEE Section, and partly matched in equipment from the Electrical and Computer Engineering Department.”

“The re-creation of the IEEE SB Office and McNaughton Learning Centre would be considered

our most notable achievement because it provides student members a much needed space and collection of resources in which we can work on current projects and



IEEE First Place winners with their EV Motorcycle at the Summer 2008 499 design competition gather with executive members of the IEEE Victoria Section. From left: SB Chair Alexander Hoole, UVic SB Counselor Kin Li, Section Treasurer Jon Preston, IEEE Victoria Section Chair David Gregson, and team members Christopher Cheng, Ruairidh Mackinnon, Chris Rittaler, Kyle Cameron, and Shane Reiersen.



Members of the UVic SB gather in the McNaughton Centre after a meeting. From left: Brandon Graham Knight, treasurer, Jeevan Padda, secretary, Prabhat Kumar, events coordinator, Ron Desmarais, past chair, and Alexander Hoole, chair.

plan future ones,” adds Alexander Hoole, current chair of the SB. “In support of the saying, ‘build it and they will come,’ we have also been able to increase membership in the IEEE at UVic.”

Compliments of...

The new office and learning center would not have been complete without the complimentary activities that greatly contributed to the SB's resources. Its book drive gathered a library of engineering textbooks for the McNaughton Learning Centre, which has provided student members with a wealth of information at their fingertips. A new Web site (<http://ieeesb.uvic.ca>) was created to provide an up-to-date and informative portal for its facilities and activities. Finally, the office and learning center were outfitted with hardware, software, testing equipment, and consumables for projects, which gives students a multitude of reasons to use the space.

In addition the allure of a space to call its own, the SB has worked at recruiting new members by promoting the benefits of membership including touting IEEE journals and magazines; advertising scholarships, awards, and competitions; and promoting speakers, workshops, and conferences. The branch also offers resources that contribute directly to its members' education experience. Computers, soldering stations, testing and measurement equipment, mentorship, a library, and access to electrical components are each elements that engineering students utilize, Hoole says. The SB also instituted a new UVic IEEE SB Student Design competition.

The SB sponsors an annual general meeting, monthly meetings of the executives, and design projects. Last year it sponsored an entry for IBM's CASCON 2007, where the branch promoted a small robotic system controlled over the Web. The 499 design contest is intended to provide an opportunity for senior engineering students to carry out a significant design project working as a team of two to five people. Experts are targeted for seminars, providing insight into interesting areas of electrical engineering and related



Second place winners with their micro-controller based guitar trainer with graphical interface at the Summer 2008 499 design competition gather with a group of IEEE members and executives. From right: Kin Li, Alexander Hoole, Jeevan Padda, Adam Zielinski, David Gregson, Team members Sumeet Leekha, Dave Zhao, Andrew Nelder, Colin MacIntosh, Abhinav Rai, Ron Desmarais, and Brandon Graham Knight.

fields. For example, Mike Mansell of the IBM Victoria Lab gave a presentation on digital signature technology with a security-from-hackers perspective. Then there are the social outlets, including pizza video night with the IEEE Victoria Section, complete with a viewing of “How William Shatner Changed the World,” and a barbeque with UVic computer science students and the Women in Computer Science and Engineering group.

Attract and support

“The organization of events and attracting new members tend to provide the greatest challenge,” Hoole explains. “We have been working on this for the past four months and have seen membership grow by roughly 25%. Bringing potential members to the McNaughton Centre, meetings, and events has had a good impact. Setting up booths at design competitions and other events, handing out promotional items/literature, and having members well informed about the benefits of membership has been important. It is also important to have the support of engineering department members, IEEE section executives, and industry partners, for without them a lot of things would not be possible.”

The SB plans to meet these challenges by equipping the McNaughton Centre with suitable electronics, amassing a library of textbooks that can be used to help with coursework, holding more social events, and starting a design contest. The branch also initiated a requirement that a graduate student must be a member of its executive team to ensure that a smooth transition of responsibilities can occur when other members are on co-op terms. This prevents the problem of maintaining continuity, which has occurred in the past, Hoole says.

In what may be a sign of things to come, the branch points to past chair Perkins as an example of the valuable experiences associated with being a member of the SB. “Susan was a catalyst responsible for invigorating the SB and she has continued on and has now started both the Region 7 Women in Engineering and GOLD Affinity groups,” Hoole explains. “This shows how SB members invigorate local sections when their members graduate.”

—Craig Causer is the managing editor of *IEEE Potentials*.



Inside the McNaughton Learning Centre.