

Application for RAS Support for Local Chapters

Please provide the following information and return application to the RAS Administrator
r.g.snyder@ieee.org.

Chapter Name: IEEE Tampa Bay RAS	Date of application: April 27th 2012
Chapter Chair: George Schott	Email Address: george@imbedded.com
Chapter Postal Address: 2581 Indigo Dr. Dunedin, FL 34698	
Amount Requested (in \$US) \$2,000	Support Period From 9/2012 to 4/2013
<p>Brief Description of Proposed activity (Workshop, seminar, etc.) and Need for Funding. In keeping with our Chapter Motto of "Learn, Do, Teach" We are proposing to put on a Workshop in October of 2012 at the University of South Florida in conjunction with the USF IEEE Student Branch and in April of 2013 at Hillsborough Community College in conjunction with the HCC Engineering Society. The Workshops are entitled "<u>Learning Your ABCs</u>" (<u>Ar</u>duino <u>B</u>readboarding <u>C</u>ircuits) and will be a hands on (1) day endeavor to introduce High School Students to the basic electrical concepts of voltage, current and resistance, the use of a multimeter, the fundamentals of Arduino Micro Controllers, breadboarding and hardware device interfacing (LEDs, Relays and MOSFETs) and programming techniques. To date we have had commitments from (4) High Schools to participate: Brandon High School, Tampa Bay Technical, Plant City High School and South County Career Center, all located in Tampa Fl. The funding request is to help with the purchase of Arduino Micro Controllers, Breadboards, Inexpensive Multimeters, LEDs, Relays MOSFETs and light refreshments. All purchased hardware will be inventoried, tagged and retained by Tampa Bay RAS for subsequent workshop use.</p> <p>The RAS Chapter Goals for these Workshops are:</p> <ol style="list-style-type: none"> 1. Provide RAS Members and IEEE Student Members with Mentoring Experience and Opportunities. 2. Introduce the IEEE RAS into the local K12 World as a practical STEM Resource. 3. Provide IEEE Exposure to local Community College Students 4. Strengthen our RAS Chapter's Relationships with IEEE Student Chapter, the local Community College and the Local School District <p>Student Participant Recruitment: RAS has identified Individual Teachers at the (4) aforementioned High Schools that will nominate (4) deserving and promising STEM students for each workshop. HCC Engineering Society and USF Student IEEE will each nominate (2) participants for each workshop.</p>	
Proposed Location University of South Florida (10/12) and Hillsborough Community College (4/13)	Proposed Date October 2012 and April 2013
Number of RAS members to participate 10 RAS or USF IEEE Student Members per Workshop	Number of other participants 40 Students
<p>Goal of Activity:</p> <p><input type="checkbox"/> Continuing Education for Members</p> <p><input checked="" type="checkbox"/> Educational Outreach for:</p> <p><input type="checkbox"/> Professionals <input checked="" type="checkbox"/> College Students <input checked="" type="checkbox"/> Elementary/Secondary Students <input type="checkbox"/> Public</p> <p><input type="checkbox"/> Other (describe):</p>	
<p>IMPORTANT: IEEE Society Grant monies must be deposited or transferred to a bank account in the name of the IEEE-RAS chapter or the IEEE section (if the chapter does not have a bank account.). Funds cannot be transferred to other <i>personal, business, or professional accounts</i>, except for reimbursement of authorized expenses. All requests for chapter funding or for reimbursement for chapter expenses requests must be accompanied a completed IEEE Society Chapter Funding Form and original receipts for all expenses in excess of US\$25.00. Please contact the RAS Treasurer, Dr. Xiaoping Yun yun@ieee.org if you have questions.</p>	

Detailed program of planned activities and main events related to IEEE members

1. Each “*Learning Your ABCs*” Workshop will consist of (20) Participants split into teams of two and each pair of students will be individually mentored by a RAS or IEEE Student Mentor.
2. The Workshop will run from (8AM to 500PM) in an existing USF or HCC computer lab with (20) Workstations. Workstation will be equipped with USB 2.0 ports capable of sourcing 500milliamps for workshop power. Additionally the workstation must have Internet Access. All of the necessary hardware for the workshop will be distributed to students by the Mentors.
3. At the Workshop, Each Student will use the Internet to reach a RAS Moodle Website (Course delivery Software) where they will have a find a “*Learning Your ABCs*” Workshop Course. The course will have IEEE developed topics which cover all of the workshop prerequisites, workshop activities and provide questions for which the students will provide answers developed from using the microcontroller, breadboard, multimeter and understanding interface hardware devices in a “hands on” environment. The Moodle Website will be available to students at least (2) weeks prior to Workshop.
4. Lunch will be provided to the Students and Mentors.
5. RAS will coordinate the development with IEEE Student Members of the Moodle content which will cover basic concepts like Ohm’s Law, Breadboarding, using a Multimeter to make measurements, hooking up an Arduino and the rudiments of interfacing devices like LEDs, MOSFETs.

In the future, this workshop could possibly may be made available to the General Public and used as a revenue generating activity for Chapter Outreach Efforts.

Proposed budget and sources of co-financing (please fill in and include more rows if required).

OUTGO

Activity	Description of expense	Number of people involved	Amount
Workshops	Facility Rental(USF/HCC)	60	\$1200
	Food		\$300
	Hardware		\$2000
	Moodle Web Hosting		\$100
Total			\$3600

INCOME

IEEE-RAS Requested	\$2000	
Hillsborough Community College (In kind Donation)	\$600	
University of South Florida (In kind Donation)	\$600	
Hillsborough County Public Schools (lunches)	\$300	
ElectrathonOfTampabay.Org Inc (In Kind Donation)	\$100	
Total		\$3600

George Schott as representative of this application for sponsorship, I promise to provide to the chair of the 'Chapter and International Activities Committee' of IEEE-RAS the following:

1. Some pictures of the event for possible publications in society related PR
2. A brief description reporting about the event and the major outcomes
3. Fill in the form which will be available at the WWW of the society
4. Other information that could be requested to justify the activity

Signature, date and place

Proposed RAS Budget Grant

Arduino UNO Microcontrollers	\$35eachx20	\$700
Breadboards 6" Modular	\$15eachx20	\$300
Wire Jumpers Kits	\$5.00eachx20	\$100
Parts Storage Boxes	\$20eachx20	\$400
Multimeters	\$10eachx20	\$200
Potentiometers, Resistors assorted components	Indeterminate quantities	\$100
Miscellaneous Tools	Wire strippers/cutters, Solder Station	\$200