

The Institute of Navigation

Navigation Apprenticeship/Scholarship

Attention College Students in the Dayton Section area:

The Navigation Apprenticeship/Scholarship is an opportunity for outstanding college students to work with a "Navigation Mentor" to build their science and engineering knowledge while developing problem-solving skills in a real-life working environment. We hope you will apply for the 2012-2013 Navigation Apprenticeship/Scholarship.

Think about it! You can receive a college scholarship up to \$2500 and exercise your inventive and innovative skills working side by side with a professional inventor, scientist, technologist, engineer, or entrepreneur on a navigation-related project, ranging from product design or research to laying the groundwork for a business plan. The apprenticeship is a great way for you to experience how science and engineering can be used to solve navigation-related problems.

Administered by the Institute of Navigation (ION), the Navigation Apprenticeship/Scholarship is an experiential and up to \$2,500 scholarship award presented to one or two college student inventor(s)/innovator(s) each year. Should you be selected as the Navigation Apprentice, you will be matched with a Navigation Mentor to learn about navigation system research and development first-hand. The apprenticeship will be tailored to your interests and experience. Apprenticeships are individually scheduled to meet the winners' schedules and goals. It will take place over the summer prior to the scholarship award and/or during the fall academic term of the scholarship award. The recipients are announced in May of the application year. *The scholarship will be awarded once the student has been enrolled in the college or university of his/her choice for the award year.* The scholarship will be awarded directly to the college or university in equal amounts for each academic term during the award year.

The deadline for applications for the 2012-2013 ION Dayton Section Navigation Apprenticeship/Scholarship is April 6, 2012. All students who have completed at least one academic term of college, in a bachelor's or higher degree program, at the time of application, are eligible for the award.

See our website at <http://www.ion.org/sections/dayton/apprenticeship.pdf> for an application. You can also email me at Boyd.Holsapple@gmail.com to request an application.

We look forward to seeing your application!

With best wishes,

Boyd Holsapple
Program Officer
Dayton Section

The Institute of Navigation (ION) Navigation Apprenticeship/Scholarship is an experiential and financial award launched in 2002 and granted to outstanding college students showing special achievement and promise in navigation-related inventions and/or innovations. Winners will work with professional "Navigation Mentors" to increase their understanding of the navigation sciences.

The Institute of Navigation College Navigation Apprenticeship Frequently Asked Questions

What is the college Navigation Apprenticeship/Scholarship?

The Navigation Apprenticeship/Scholarship is an annual experiential and up to \$2500 scholarship award presented to students who have demonstrated remarkable navigation-related inventiveness and/or innovativeness. Applicants must have completed at least one academic term (or equivalent for quarter system) of college. Depending on the student's interests, he or she will be paired with a leading scientist, technologist, engineer or entrepreneur "Navigation Mentor" in order to learn about the process of developing and inventing navigation-related technology first-hand. The Navigation Mentor will work with the winner to tailor an apprenticeship to the student's interests and schedule. *The scholarship will be awarded once the student has enrolled in the college or university of his/her choice.* The scholarship will be paid directly to the college or university in equal payments over the 2012-2013 school year.

What is its purpose?

The Apprenticeship/Scholarship is designed to reward and encourage inventiveness and innovativeness by providing hands-on experience and exposure to a professional scientific/technological environment. The Navigation Apprentice is expected to serve as an inspirational role model for other students.

How many Navigation Apprenticeships/Scholarships are there?

Up to two Apprenticeship/Scholarships will be awarded each year in the region of the Dayton Section.

What does "up to \$2500 scholarship" mean?

The maximum total scholarship award each year is \$2500. If two scholarships are awarded, each scholarship amount will be \$1250. If only one scholarship is awarded, the amount will be \$2500. The number of scholarships awarded each year will be decided by the Dayton Section based on the number of qualified applicants. The Dayton Section and the I.O.N National Office reserve the right to change the number of scholarships awarded at any time prior to announcing the Apprenticeship/Scholarship winner(s).

Who chooses the recipient of the Apprenticeship/Scholarship?

A panel of Dayton Section members selects the winner(s) of the Navigation Apprenticeship/Scholarship for their area.

What type of work is involved in the apprenticeship?

As each apprenticeship is specially tailored to the student recipient's interests and experience, the apprentice may work with the Navigation Mentor on a project selected from a variety of types. An apprenticeship may include, but is not limited to, assisting on the design and development of a new product or technology, conducting research, meeting other professionals in the mentor's field, and attending technical meetings, such as the monthly Dayton Section luncheons.

Who are the mentors?

Mentors are identified from national leaders in science, technology, and engineering, working in the area of the Dayton Section. In practice, many students request a specific mentor from their college/university or a navigation-related company. Such requests will be evaluated and approved on a case-by-case basis.

Can the apprentice work on his or her own project, or must the apprentice work on an existing project?

Because each apprenticeship is unique, the apprentice may choose to work on his or her own project or a current project in development at the mentor's organization. The apprentice may attend tours of local navigation research and development organizations. Attendance at local ION meetings will also be offered as an option to the apprentice.

Where does the apprenticeship take place?

The apprenticeship will normally take place in the mentor's organization. For Dayton Section area applicants, the apprenticeship will take place with a Dayton ION Section member. Requests to conduct the apprenticeship at other locations (such as at or near the apprentice's college/university) will be evaluated and approved on a case-by-case basis.

How long is the apprenticeship?

The apprenticeship can be expected to take a total of 40-80 hours, spread over a period of up to six months, including the summer before the award and first academic term of the award period. It will be tailored to meet the student's schedule and needs. It is not intended to create hardships for students with summer jobs or classes, though it may be necessary to take a few hours off occasionally. Every effort will be made to be flexible and support the student's needs for scheduling the apprenticeship.

Is the apprenticeship mandatory?

Yes, the apprenticeship is a mandatory element of the award. Winners who do not make a concerted effort to complete the apprenticeship prior to the end of the first academic term (or equivalent) of the award period may lose the scholarship for the second academic term (or equivalent). Every effort will be made by the Dayton Section to help the winner complete the apprenticeship in a flexible, yet timely, manner.

Where does the student stay during the apprenticeship?

We highly recommend that the student live at home during the apprenticeship. Room and board are not provided as part of the apprenticeship program. A concerted effort will be made to develop an appropriate apprenticeship, which does not require expensive travel by the student.

When do the apprentice and mentor first meet?

If necessary, the ION Navigation Apprenticeship/Scholarship program will arrange for the apprentice and mentor to meet prior to the apprenticeship. A good time for this to occur is at the Dayton Section end-of-year dinner in June.

Who is eligible?

All college students in a bachelor's or higher degree program with at least one term of college experience, residing in the region of the Dayton Section, Institute of Navigation, at the time of application, are eligible for the apprenticeship. Applicants may be of any age but must be American citizens or permanent residents.

Will winning the Apprenticeship/Scholarship affect the student's college financial aid package during the award year? Since there is a cash award, the Apprenticeship/Scholarship may have a bearing on the student's financial aid package for college. However, as each college or university has its own financial aid policies, the student should confirm this directly with his or her college of choice.

How do I apply?

Students interested in applying for the Navigation Apprenticeship/Scholarship should e-mail Mr. Boyd Holsapple, program officer, at Boyd.Holsapple@gmail.com for application materials. You can also download an application at <http://www.ion.org/sections/dayton/apprenticeship.pdf>.

The 2012-2013 Institute of Navigation Navigation Apprenticeship/Scholarship Application Form

I. Please type or print the following information:

Applicant Name: _____

Number of College Terms Completed: _____

College: _____

College Address: _____

College Department Telephone & Fax: _____

Home Address: _____

Home Telephone & Fax: _____

Email: _____

II. Applicant Signature: _____

III. Please submit the following with this application form.

A. **Personal Statement.** In 750 words or less, describe your interest in navigation technology, creative problem-solving, relevant experience, why you want the apprenticeship/scholarship, and what you hope to gain from the experience.

B. **Two (2) letters of recommendation** from college faculty members and/or others who are qualified to comment on your invention-related accomplishments, ability to work independently, and how the experience may influence you. Recommenders must state their professional affiliation and the nature of their relationship with you. Recommenders cannot be family members.

C. Official copy of college transcript. This may be a copy released to the student, but it must originate from the registrar's office. If you have less than two years college experience, a high school transcript must also be provided together with the college transcript.

D. **(OPTIONAL) Up to two 8.5" x 11" pages of photos/diagrams of your work**, if applicable, and a recent photograph of yourself. Articles on your accomplishments are also acceptable. Please note that we may use these materials for public education activities, such as a feature on the program's ION web site.

IV. Send **ONE (1) UNBOUND ORIGINAL and FOUR (4) STAPLED COPIES** of the Application Form, Personal Statement, letters of recommendation, and other materials to:

Boyd E. Holsapple (ION Apprenticeship)
4158 Swimming Pool Road
Yellow Springs, Ohio 45387-8700

All materials must be received on or before April 6, 2012. If you have questions, please contact Mr. Boyd Holsapple, program officer, at Boyd.Holsapple@gmail.com