



**SCI-FY Summer Institute**  
**UC Berkeley, August 2<sup>nd</sup> to August 13<sup>th</sup>, 2010**  
**SCIENCE FOR YOUTH**  
**IT Leadership Program**

**About SCI-FY**

SCI-FY, a project of the International Computer Science Institute (ICSI), encourages students of color and women to develop skills, leadership, and an interest in the fields of computer science, engineering, information technology, and the sciences. SCI-FY works with twenty-five middle school students between the 6<sup>th</sup> and 8<sup>th</sup> grades. These youth are self-motivated and are on their way to becoming future engineers, technologists, scientists, and leaders of our global community. SCI-FY facilitates the development of skills in problem solving, teamwork, lifelong learning, multiple ways of communicating, and technological literacy. We serve students in the surrounding areas that include Alameda, Contra Costa, and San Francisco counties.

We have several programs that work together to create a support pipeline that identifies, recruits and retains promising new leaders who are women and otherwise underrepresented. Students engage in hands-on, inquiry-based projects and activities that challenge them to integrate their conceptual and procedural understanding. The intent of SCI-FY is to cultivate in students an understanding of scientific thinking, the design process of engineering, the power of mathematical problem solving, and the application of computer modeling and programming to solving real-life problems. We believe this exposure will help encourage historically underrepresented ethnic groups and women to pursue degrees in higher education and careers in science, technology, and engineering fields.

**A Component of BFOIT**

SCI-FY is the middle school component of Berkeley Foundation for Opportunities in Information Technology (BFOIT). BFOIT was founded in 1997 in order to assist disadvantaged and underrepresented youth in pursuing higher education in computer science and information technology fields in public universities and colleges in California. The BFOIT Summer Institute for Future Computer Scientists brings twenty-five high school students from the surrounding counties to the Berkeley campus in order to learn some fundamentals of computer programming, discuss educational and career opportunities, and experience the university environment.

SCI-FY leadership training program consists of:

- Two-week Technology Training Summer Institute held in August at UC Berkeley. The institute is designed to train students in the process of inventing technologies and computer programming. They meet with professional experts, academics, and researchers in the fields of information technology, computer science, science, mathematics, and engineering. These professionals come from the educational, nonprofit, economic, social, and political sectors.
- Workshops, lectures, seminars, and informal discussions where students learn about vital issues, acquire skills, and develop strategies that can be applied to meet interests and needs in their communities.
- Cultural activities such as visits to museums, media presentations, lectures, and conferences.
- Academic year meetings that provide students an opportunity to assemble every other month to continue their learning and exploration of fun activities and projects.



## Program Description

The Berkeley Foundation for Opportunities in Information Technology (BFOIT) is a project of the International Computer Science Institute (ICSI) that supports historically underrepresented ethnic minorities and women in their desire to become leaders in the fields of computer science, mathematics, engineering, and information technology. The intent is to provide youth with knowledge, resources, practical programming skills and guidance in their pursuit of higher education and production of technology.

## History

The Berkeley Foundation for Opportunities in Information Technology (BFOIT) was born in 1998 when the Industrial Advisory Board of U.C. Berkeley's Electrical Engineering and Computer Science Department recommended that a private entity be created to address the lack of racial, ethnic, and gender diversity in information technology fields in California post-secondary schools and to assist area schools in increasing opportunities for minority and female students and diversifying information technology fields. Its long-term goal is to make the student body composition of information technology departments of these schools more reflective of the demographics of the state.

## Services

BFOIT's programs serve a distinct body of students through their pre-college and college years with services that are comprehensive, interconnected, and hands-on. BFOIT provides high tech training, field trips, career advisement, and educational assistance to potential female and minority college students, including summer institutes for high school students, admissions application reinforcement, and free SAT preparation classes. We follow through by recruiting promising students into the schools and developing a network of undergraduate support that increases student retention and graduation.

## Target Population

The students served by BFOIT are Bay Area middle, high school, and college students who are members of groups traditionally underrepresented in computer science fields. Science for Youth (SCI-FY) is the middle school component of BFOIT that serves students between 6<sup>th</sup> and 8<sup>th</sup> grade. BFOIT targets high school students matriculating from 9<sup>th</sup> to 12<sup>th</sup> grade. These young men and women are intelligent students who show an interest in computer science. They have the potential to be the economic and technological leaders of tomorrow.

## **BFOIT / SCI-FY Summer Institute for Future Computer Scientists**

When: August 2<sup>nd</sup> – August 13<sup>th</sup>, 2010  
Location: UC Berkeley  
Time: 9:00am to 4:00pm

For more information, contact Dr. Chris Harrison, SCI-FY Program Coordinator at 510-666-2967 or visit [www.bfoit.org](http://www.bfoit.org).