

Carnegie Mellon University



Programs for K-12 Students and Parents

Alpha Phi Omega, Kappa Chapter

Alpha Phi Omega (APhO) is a national, co-educational Service Fraternity based on the principles of Leadership, Friendship, and Service. Membership in our chapter is open to anyone who is a student at Carnegie Mellon; we do not discriminate. APhO has a strong scouting program that helps local Boy Scouts and Girl Scouts through various projects. These include Merit Badge University for the Boy Scouts and Interest Patch Day for the Girl Scouts where we teach between 200 - 300 scouts their required badges. We also help with other smaller events such as Pinewood Derby, camporees, etc.

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Address:

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Pittsburgh, PA 15213

Andrew's Leap Robotics Activities

Andrew's Leap is a summer enrichment program run by the Carnegie Mellon University School of Computer Science. All local area high school students are encouraged to apply (and occasional middle school students). Through special classes and guest faculty seminars, students will be exposed to the frontiers of computer science. They will "leap" ahead approximately ten years. Students will have an opportunity to interact with some of the country's leading scientists, and will emerge from the program with a vivid overview of Computer Science at Carnegie Mellon. Andrew's Leap has been run every summer since 1991. Leap is not for academic credit. We do not evaluate or grade the participants. We want students who want to do it for the fun of it.

Email: leap@cs.cmu.edu

Site: <http://www.cs.cmu.edu/~leap/>

Phone: (412) 268-5099

Architecture Explorations

Architecture Explorations offers architecture programs to children and youth on the Carnegie Mellon campus, in Pittsburgh area schools, and in urban neighborhoods. Our flagship program, the Saturday Sequence is a ten-week program and is offered twice a year on campus. Classes focus on the architectural design process and creative problem solving skills, which are indispensable components of an architectural education. Art and Architecture Summer Camps were established with the Carnegie Museum of Art in 2005 and provide nine weeks of topic-specific architecture programming. After School Workshops, with the Children's Museum of Pittsburgh since 2004, bring an introduction to architecture into the school environment. In Architecture Building Communities, high school students from urban neighborhoods engage their communities to create small-scale design projects on a vacant lots. The diversification of our program offerings allows Architecture Explorations to provide educational enrichment both on our campus and in our community.

Email: kdocter@andrew.cmu.edu

Site: http://www.arc.cmu.edu/cmu/programs/outreach/arch_explore.jsp

Phone: (412) 268-1541

Arts Greenhouse

The Arts Greenhouse is a free hip-hop music education program serving Pittsburgh teens through the resources of Carnegie Mellon. Thus far, this goal has been met through music technology classes, music recording projects, workshops on special topics relating to hip-hop, and performances that bring socially conscious artists to Pittsburgh.

Currently the Arts Greenhouse leads music technology classes at Carnegie Mellon, guides recording projects with the School of Music, and teaches workshops around the Pittsburgh area. Pittsburgh teens, ages 13 to 19, are welcome to attend.

Email: jm1e@andrew.cmu.edu

Site: for more information visit: <http://www.pghbeatmakers.com/>

Phone: (412) 268-3239

Athletic Camps

A variety of camps and clinics are offered each summer. Programs include Wing T Football Camp for 9-12 grade students, soccer camp for children ages 6-14, Learn to Swim Classes and more!

Site: <http://www.cmu.edu/athletics/department/camp-clinic.html>

Phone: (412) 268-8054

Carnegie Mellon Children's School

Traditionally, our program is designed to offer options for morning or afternoon preschool and full-day kindergarten for children in community as well as CMU families (constituting approximately 85% and 15% of our population respectively). Consistent with the 1990 CMU Work and Family Report, we offer a high quality program equitably to diverse families. To this end, we offer tuition waivers to low-income families.

In addition to providing a quality educational program, we support our families by providing written information and seminars that might be of interest to all families, age appropriate family activities (e.g., family festivals, school visits, etc.), and individual counseling and referrals as needed.

Site: <http://www.psy.cmu.edu/childrenschool/>

Phone: (412) 268-2199

Chartiers Valley Spanish Program

In May 1995, Rick Donato and Dick Tucker were invited to attend an informal meeting with the Superintendent and administrators of Chartiers Valley School District. The invitation resulted in part from our previous research examining diverse aspects of the implementation of a Japanese program at the elementary school, and partly from the fact that Donato directs the major foreign language teacher preparation program in the region. This meeting marked the beginning of a mutually beneficial and thoroughly enjoyable school district-university partnership which continues to the present day.

The group formed a "Foreign Language Program Committee" to oversee the planning and implementation of a new and innovative foreign language program. Committee members consist of the district's Director of Instruction, the Superintendent, principals from each school, selected teachers, the chair of the secondary school foreign languages department, and the university collaborators--Dick Tucker from Carnegie Mellon and Rick Donato from the University of Pittsburgh. The group meets regularly to plan, review accomplishments, and make decisions concerning priorities for future work. As appropriate, subgroups or individuals carry out specific activities such as the planning of the end-of-year assessments which they report back to the Committee.

The relationship among Tucker, Donato and the Chartiers Valley School District has led to the development of innovative curricula, the implementation of innovative end-of-year assessments and has resulted in the publication of more than 30 research reports.

Contact: Dick Tucker

Email: grtucker@andrew.cmu.edu

Site: <http://staff.cvsd.net/spanish/>

Phone: (412) 268-2934

Fax: 412681328

Address:

Modern Languages (BH 16))

Carnegie Mellon University

Pittsburgh, PA 15213-3890

Circulo Juvenil de Cultura, Spanish Heritage Outreach Program

This is a Spanish-language cultural program for Spanish-speaking children between the ages of 6-11 who live in southwestern Pennsylvania. Modern Language Faculty, professional primary school teachers and musicians, Modern Languages students and parents collaborate to provide the children with a supportive, fun and educational environment in which to celebrate the heritage language and cultures.

Email: machugar@andrew.cmu.edu

Civil and Environmental Engineering Green Design Apprenticeship Program

How do the decisions you make everyday impact the environment? How can we best direct our efforts in the future to minimize the effects humans have on their environment? These are the questions that the Green Design Institute at Carnegie Mellon University is working to answer. Balancing the needs of people and the environment is a difficult problem with no simple solutions. By understanding and comparing the environmental impacts and costs of different technologies we hope to help people make the best decisions possible. Student apprentices with the Green Design Institute are exposed to cutting edge thinking in the areas of environmental decision-making. Registration in this program is coordinated by the Allegheny Intermediate Unit.

Website: <http://www.ce.cmu.edu/GreenDesign/>

[CMITES Elementary Student Talent Search](#)

C-MITES offers testing for the Elementary Student Talent Search at 50 sites across the state. Each year, approximately 1,300 3rd - 6th grade students take the EXPLORE test through C-MITES. Students must have scored at the 95th percentile or above on at least one section of a standardized test, such as the Iowa Tests of Basic Skills, Stanford Achievement Test, or Metropolitan Achievement Test. These talented students are then invited to take an above-level test called the EXPLORE. The EXPLORE was designed for 8th graders; we give it to younger students because they have already demonstrated that they can perform extremely well on tests designed for their age group. On this more challenging test, we discover what the students know, but also what they don't know. Both pieces of information are essential for good curriculum planning. C-MITES Talent Search test sites have been established at many schools throughout Pennsylvania. Scholarships are available to cover the test registration fee.

Contact: Ann Shoplik

Email: cmities@cmu.edu

Site: <http://www.cmu.edu/cmities/ests.html>

Phone: (412) 268-1629

[CMITES Summer Program](#)

Classes are offered at sites throughout Pennsylvania. C-MITES summer courses include: Advertising Edge, Amusement Park Physics, CO2 Dragsters, Dollars and Sense, eMission: Moon, Mars and Beyond, eMission: Montserrat, Explorations in Science, Forensic Science, Green Engineering, Green Robotics, Harry Potter's Science Adventure, Informal Geometry, K'NEX Geometry, Mathcounts, Math Mania, Programming Using Alice, Roaming Ancient Rome, Robotics Programming and Design, Solar System Astronomy, Solve a Murder Mystery and You Make Me Sick: Immunology. These courses are designed to challenge talented youth in 3rd-8th grade in a hands-on atmosphere. Scholarships are available.

Contact: Ann Shoplik

Email: cmities@cmu.edu

Site: <http://www.cmu.edu/cmities/summer.html>

Phone: (412) 268-1629

[CMITES Weekend Workshops](#)

The C-MITES program provides many services for academically talented students in Pennsylvania. Weekend workshops are available to all students who have participated in the C-MITES Talent Search, are enrolled in a gifted program, or have scored at or above the 95th percentile on a standardized test. Workshops are designed for talented kindergartners through 9th graders. Workshops are held at Carnegie Mellon University and Lower Merion High School in Ardmore, PA. Attendance is limited to 20 students per class and classes are filled on a first come, first served basis. Students may request to attend up to six classes. Morning sessions are from 9:00 a.m. to 12:00 noon, and the afternoon sessions are from 1:00 to 4:00 p.m. Scholarships are available to those on the free or reduced-cost lunch program at their school.

Contact: Ann Shoplik

Email: cmities@cmu.edu

Site: <http://www.cmu.edu/cmities/ww.html>

Phone: (412) 268-1629

Fax: (412) 268-1049

[College Success 101](#)

The purpose of CS 101 is to educate and prepare disadvantaged high school sophomores and juniors for the college admission process. Students attending CS 101 must have at least a 2.3 GPA and must show a desire to attend a four-year college directly after high school graduation.

Email: clesane@andrew.cmu.edu

Site: <http://www.cmu.edu/enrollment/admission/CS101>

Phone: (412) 268-2082

[Creative Technology Nights for Girls \(TechNights\)](#)

Free weekly workshops organized by Women@SCS providing hands-on technology skills to middle school girls. This is a drop in program -- girls can attend all workshops or those of their choice. Here is a sampling of some recent workshops:

- Photoshop
- GarageBand
- Apple Workshop
- Scratch
- TechNights Tour of ETC
- Cryptography and Web Privacy
- Treasure Hunt
- Google Workshop
- ETC at TechNights
- Make A Video Game! Graphics Processing

- Cartoon Animation

Contact: Dr. Carol Frieze
Email: cfrieze@cs.cmu.edu
Site: <http://women.cs.cmu.edu/technights/>
Phone: (412) 268-9071

Decision Makers

In DECISION MAKERS, students combine strategy learning with a computer-supported self -assessment of decision making skills, personal assets and networks of support. With CMU mentors they develop a personal "Journey Book" focused identity as decision makers, goals and plans. The Journey Book works as a scaffold for progress self-assessments and formal assessment of growth in reflective decision making. DECISION MAKERS is part of the Pittsburgh Schools' Start on Success program for learning disabled students.

Contact: Dr. Linda Flower
Email: lf54@andrew.cmu.edu
Site: <http://www.cmu.edu/thinktank/docs/29.pdf.pdf>
Phone: (412) 268-2863

East End Youth Projects: Tutoring

East End Youth Projects seeks to make a difference in the lives of young people in the Pittsburgh Community by pairing them with a mentor who will meet with them weekly to provide academic and personal support. Our hope is that, with personalized assistance, children will be empowered to rise to their fullest potential. There are opportunities for Carnegie Mellon students to serve as a tutor/mentor to children in most K-8 age groups in Reading, Math, and other subjects, during school hours. Tutors are asked to volunteer 2 hours/week, for a semester-long commitment. Time slots are scheduled at the beginning of each semester and include transportation between Carnegie Mellon and the schools. From the enthusiastic response and growing attendance rates we have observed, it seems that we've begun to accomplish our goals; our undying effort to provide students with strong role models who care about and foster the individual needs and the growing and developing talents within every child. For CMU students who don't have time during the school day, we have the option of going to help Sterrett Middle School students with their homework and review concepts learned in class during an after school program on Tuesdays, Wednesdays and Thursdays.

Contact: Student Leaders
Email: eastend@andrew.cmu.edu
Site: <http://www.andrew.cmu.edu/~eastend/>
Phone: (412) 268-8894

Education Robotics

Our most recent educational endeavor aims to create a new kind of robotic exploration class for high school juniors. Called Robotic Autonomy, this fully accredited summer course in robotics enables enthusiastic students to build robots using special fast-build kits that we have designed, complete with the CMUcam vision system, and thereafter program the robot to enable more and more intelligent rover missions in the classroom and home environments. At the conclusion of the course, students take the robots home and are thus able to continue exploring robotics and rover science throughout the school year.

Contact: Illah Nourbakhsh
Email: illah@ri.cmu.edu
Phone: (412) 268-2007

Expanding Your Horizons: Women@SCS Annual Presentations

Each year, Women@SCS present workshops entitled "Is There A Robot In Your Future?" at the Expanding Your Horizons (EYH) conference. This is a nationally held event aimed at increasing the participation of girls and women in mathematics and science. Our teams present two sessions of workshops that have been attended by about thirty middle school girls each year. Our robotics workshops have proved to be a very successful part of EYH in Pittsburgh gaining high acclaim from participants.

Contact: Carol Frieze
Email: women@scs.cmu.edu
Site: <http://women.cs.cmu.edu/What/Outreach/>
Phone: (412) 268-9071

Fitwits

More kids are learning how to eat healthy thanks to Fitwits — a program created by Carnegie Mellon School of Design and UPMC's St. Margaret Family Health Centers.

Featuring fun characters such as Rita Rollup, Elvis Pretzley and Deep Dish Don, the Fitwits program is a series of learning games embedded with positive, educational health content about nutrition and physical activity for pre-adolescents.

According to Fitwits co-creator Kristin Hughes, associate professor in Carnegie Mellon's School of Design, the program

is a holistic, preventative approach toward getting the community to talk about the health effects of obesity, nutrition, exercise, and portion size.

"I think the program begins to help people to talk about obesity and nutrition in a non-threatening way," said Hughes. "In a very entertaining way, it teaches what foods are high in sugar and fat, as well as the importance of exercising 60 minutes a day."

Contact: Kristen Hughes
Site: <http://www.fitwits.org/>

[Girls of Steel FIRST Robotics Team](#)

Carnegie Mellon University's [Field Robotics Center](#) (FRC) and the [PghTech Women Network](#)(tm) have launched an all-girl robotics team, girlsFIRST, which will compete in a FIRST (For Inspiration and Recognition of Science and Technology) regional event in spring 2011.

The team is made up of 26 students in grades 9 through 12 from 11 Pittsburgh area high schools, including Avonworth, The Ellis School, Jeannette, Oakland Catholic, PA Cyber Charter, PA Leadership Charter, Pine-Richland, Seneca Valley, The University School, Upper St. Clair, Winchester Thurston and a home school student. The program is intended to nurture interest among girls in robotics and in technological careers in general.

Contact: Patti Rote
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Phone: (412) 576-9742

[International Science & Engineering Fair](#)

Intel ISEF is coming to Pittsburgh in May 2012. This event will bring more than 1,600 high school competitors from 60+ countries to our city. Carnegie Mellon is helping to coordinate the Local Arrangements Committee. We'll need lots of volunteers prior to the event and people to help as judges, interpreters and volunteers during the event, which will be held from May 13-18.

Contact: Judith Hallinen
Email: jh4p@andrew.cmu.edu
Site: <http://www.societyforscience.org/isef/>

[Linguistics Olympiad](#)

This olympiad is a contest in which high-school students solve linguistic puzzles. In solving the problems, students learn about the diversity and consistency of language, while exercising logic skills. No prior knowledge of linguistics or second languages is necessary. Professionals in linguistics, computational linguistics and language technologies use dozens of languages to create engaging problems that represent cutting edge issues in their fields. The competition has attracted top students to study and work in those same fields. It is truly an opportunity for young people to experience a taste of natural-language processing in the 21st century.

There is NO participation fee!

Contact: Dr. Lori Levin
Email: lsl@cs.cmu.edu
Site: <http://www.naclo.cs.cmu.edu/>

[Moving 4th Into Engineering](#)

Each spring, the Institute for Complex Engineered Systems (ICES) hosts Moving 4th Into Engineering, an engineering outreach event. Approximately 25 fourth-grade students from various Pittsburgh area schools are invited to visit Carnegie Mellon's campus and participate in a full day of science activities. This program provides the students with an interactive introduction to the exciting world of engineering. Through various experiments and exercises, students learn how engineering plays a part in many of the ordinary things they see every day. Moving 4th aims to inspire young students to seek out future studies in math, science and engineering. A diverse group of ICES faculty, staff and student volunteers lead the program and work with the children throughout the day.

Contact: Alicia Angemeer
Email: adbrown@andrew.cmu.edu
Site: http://www.ices.cmu.edu/moving_4th.html
Phone: (412) 268-5227

[Murals](#)

Murals is an innovative program aimed at inspiring and transforming the most troubled of youth through the informal arts and broad community partnerships, and is a partnership with the Marilyn G. Rabb Foundation. Participants are guided by our working-artist/facilitators through different art forms in small ensembles. From these small facilitated groups, students are shown real-world positive career opportunities and are integrated back in to the educational process, providing hope beyond the streets. Carnegie Mellon students act as mentors to the elementary children who participate in the program.

Contact: Mr. Phil Koch
Email: phil@mgrf.org
Site: <http://www.mgrf.org>
Phone: (412) 400-9435

[My Secure Cyberspace](#)

Inspired by the President's National Strategy to secure cyberspace, the MySecureCyberspace initiative empowers users to secure their part of cyberspace. The initiative is made up of two major projects: an informational Web portal and an interactive educational game. The portal, located at www.MySecureCyberspace.com, provides customized information to home users about cyber-security threats, in addition to tactical countermeasures and legal, ethical, and privacy issues related to each cyber-security threat. Carnegie Cadets: The MySecureCyberspace Game reaches out to elementary school children through a series of training missions that reinforce principles of safe and responsible computing. Through presentations, conferences, and collaborations with schools and community centers that are centered on the MySecureCyberspace initiative, Carnegie Mellon CyLab and the Information Networking Institute work to raise public awareness of cyber-security.

Carnegie Cadets: The MySecureCyberspace Game is distributed to Allegheny County schools, as well as other schools across the nation, and is available as a free download from www.carnegiecyberacademy.com.

Contact: Dr. Dena Haritos Tsamitis
Email: dena@cmu.edu
Site: <http://www.MySecureCyberspace.com>
Phone: (412) 268-3297

[My True Voice](#)

With a passionate interest in Outreach for the School of Drama, Natalie has developed a community based outreach course for her sophomore students, who teach distinct speech to disadvantaged children to help fifth grade students at Holy Rosary School improve speaking skills. To have a teaching tool for this work, she is working with research scientists at Cepstral, LLD to adapt vocal synthesis software. It is being tested in her outreach course The My True Voice Project. The My True Voice Project combines the teaching of pronunciation with an exploration of poetry and the use of voice synthesis software. The program is featured on the PBS program hosted by Robyn MacNeil: "Do you Speak American?"

Contact: Natalie Shirer
Email: nbaker@andrew.cmu.edu
Site: <http://www.cs.cmu.edu/hot/2000/05/mytruevoice.html>
Phone: (412) 268-5751

[Pennsylvania Junior Academy of Sciences](#)

This program offers high school students enrichment experience in science and math careers. The following workshops are currently being taught:

- Turning Genes On and Off
- Making Glow in the Dark Bacteria

[Physics Concepts Outreach](#)

Inner-city middle school students come to the CMU Physics Department weekly during the academic year to carry out science fair projects with the help of CMU undergraduate mentors during the Fall semester, present their project at the Pennsylvania Junior Academy of Science (PJAS) science fair the first Saturday in February, and during the rest of the Spring semester attend lecture demonstrations on Physics Concepts given by CMU Physics faculty. The program is funded by the Grable Foundation, paying for bus transportation, student stipends, and equipment for science fair projects. Professors Thomas Ferguson and Gregg Franklin participate, and Dr. Barry Luokkala and his assistants help the mentors design and get equipment for the projects. The CMU physics department provides laboratories and support for the Program. Science teachers from the schools bring the students and help ensure consistent student participation. In 2008-9 seven middle school students won first place awards at the February PJAS fair and will compete at Penn State in the PA State Competition in May, 2009.

Contact: Mr. Leonard Kisslinger
Email: kissling@andrew.cmu.edu
Phone: (412) 268-2768
Address:
CMU Physics Department

[Pre-College Saturday Art Program](#)

The Pre-College Saturday Art Program has for the past sixty-five years provided a learning environment for high school students in the visual arts from the Pittsburgh region as well as from West Virginia and Ohio. Tenth, eleventh, and twelfth grade students receive a comprehensive preview of professional areas of study, working with two and three-dimensional media and electronic media. Classes provide students with an introduction to and immersion in professional art training that prepares them for future study at universities, colleges and art schools.

Contact: Janice Hart
Email: jh7q@andrew.cmu.edu
Phone: (412) 268-3852

[PROGRESS: Program for Research & Outreach on Gender Equity in Society](#)

PROGRESS has three core objectives: develop local and national tools to teach women and girls how to harness the power of negotiation, form networks between nonprofit organizations to efficiently disseminate information about issues impacting women, and explore obstacles to and potential solutions for the advancement of women.

"Win-Win: How to Get What You Want"

PROGRESS takes a fresh approach to address the need for gender equity in society by teaching middle school aged girls (8-12 years old) how to negotiate. In partnership with the Girl Scout Trillium Council, which has over 22,000 members, we have developed a negotiation badge, "Win-Win: How to Get What You Want." PROGRESS hopes to instill in girls a deep understanding of the value of negotiation in helping them achieve their goals.

Negotiation Seminars for Youth

If your organization works with a group of young women and you feel they would benefit from learning how to negotiate, please do not hesitate to contact us. We would be happy to talk about how we can best suit the needs of your future leaders. Contact PROGRESS for details.

Contact: Ayana Ledford

Email: ledford@andrew.cmu.edu

Site: <http://www.heinz.cmu.edu/PROGRESS/>

Phone: (412) 268-8650

[Project LISTEN](#)

Project LISTEN (Literacy Innovation that Speech Technology Enables) is an inter-disciplinary research project at Carnegie Mellon University to develop a novel tool to improve literacy; an automated Reading Tutor that displays stories on a computer screen, and listens to children read aloud. To provide a pleasant, authentic experience in assisted reading, the Reading Tutor lets the child choose from a menu of high-interest stories from Weekly Reader and other sources including user-authored stories. The Reading Tutor adapts Carnegie Mellon's Sphinx-II speech recognizer to analyze the student's oral reading and intervenes when the reader makes mistakes, gets stuck, clicks for help, or is likely to encounter difficulty. The Reading Tutor responds with assistance modeled in part after expert reading teachers, but adapted to the capabilities and limitations of the technology. The current version runs under Windows (TM) 2000 on an ordinary Pentium (TM) with at least 128MB of memory. In 2002-2003, hundreds of students are using the Reading Tutor at 9 schools.

Contact: Jack Mostow

Email: mostow@cs.cmu.edu

Site: <http://www-2.cs.cmu.edu/~listen/>

Phone: (412) 268-1330

[Robotics Academy: Robotics Camps, Clubs, and Competitions](#)

The Robotics Academy is committed to using robotics to excite children about science and technology and to help create a more technologically literate society. Programs include summer camps and First Lego League competitions, held in May and December each year.

Mission Statement:

- To develop a mathematically competent and technological literate workforce;
- To influence children to become interested in robotics and related technologies as an area of study and employment;
- To grow future entrepreneurs and employees for the region and nation;
- To enhance the economic development of these technologies in Southwestern Pennsylvania;
- To develop standards-driven curriculum for middle and high school teachers;
- To catch kids having fun experimenting with science and technology.

Contact: Robin Shoop

Email: roboed@rec.ri.cmu.edu

Site: <http://www.rec.ri.cmu.edu/education/index.html>

Phone: (412) 681-7160

[Robotics Education Lab](#)

The Robotics Education Lab is a central resource to support courses and individual projects. Equipment includes manipulators, mobile robots, electronics & mechanical fabrication benches, Lego, a video editing workstation, machine vision systems and more.

Anyone affiliated with CMU and interested in robotics is welcome. Stop by and see what the lab has to offer. Lab address: Newell-Simon Hall 3206 x8-5561.

Contact: Illah Nourbakhsh

Email: illah@ri.cmu.edu

Site: <http://www.cs.cmu.edu/~rel/>

Phone: (412) 268-2007

[SEE: Summer Engineering Program for Girls](#)

The Summer Engineering Program (SEE) is a two-week summer experience for girls entering the 8th and 9th grades

who are interested in math and science. SEE gives girls hands-on experience in different forms of engineering. The theme of SEE is "Energy," and girls have an opportunity to learn about different forms of energy that are efficient and environmentally friendly. They explore forms of energy that interest them and learn how they can make a difference through engineering.

Contact: Alicia Angemeer
Email: adbrown@andrew.cmu.edu
Site: <http://www.ices.cmu.edu/see/>
Phone: (412) 268-5227

Strong Women Strong Girls

This is a mentoring program for at risk girls in grades 3-5. The program receives about 90 girls from various public schools in Pittsburgh.

Contact: Monica Bebie
Email: mbebie@andrew.cmu.edu
Site: <http://www.studentaffairs.cmu.edu/student-life/swsg>
Phone: (412) 268-2142

Student Course: Urban Middle School Music

A course in Urban Music Education is offered through the School of Music, in conjunction with a grant from the US Department of Education. Students attend all in-service sessions with the public school teachers, observe in the classroom, design lessons and co-teach them with the public school teachers.

Contact: Natalie Ozeas
Email: nlozeas+@andrew.cmu.edu
Phone: (412) 268-2382

Student-Athlete Advisory Council Field Day

Athletes volunteer to run a field day for kids of the Shadyside Boys & Girls Club. About 20-25 CMU student-athletes participate.

Contact: Carissa Sain
Email: csain@andrew.cmu.edu
Phone: (412) 268-7927

Summer Academy for Mathematics and Science (SAMS)

Sponsored by Carnegie Mellon Academic Resource Center (CMARC), this is a rigorous six-week residential summer experience designed to attract students with diverse backgrounds who are considering careers in engineering, science and other math-based disciplines. Students entering their junior or senior year are eligible to participate in the program, which will build both academic and personal skills. Different tracks will be designed for each grade level.

Traditional classroom instruction, along with creative "hands-on" projects will allow students to apply concepts and principles. The program will also include course work to improve student performance on standardized tests used in college admissions. Spending a summer-possibly two-will prepare students to enroll and succeed in highly selective colleges and universities nationwide, including Carnegie Mellon.

Contact: Ty Walton
Site: <http://www.cmu.edu/enrollment/summerprogramsfordiversity/sams.html>
Phone: (412) 268-2150

Society of Women Engineers High School Day and Middle School Day

To be successful women in engineering, we have had to be ambitious and motivated despite being part of the minority. One of our goals is to pass this motivation and sense of capability on to younger women potentially entering a technical field. High School Day is an annual event that we organize for high school juniors and seniors. The girls spend the day on the CMU campus, learning about scientific and technical careers and the lives of women in engineering. The October 2002 High School Day had the largest attendance ever. Over 400 students and 80 parents, teachers, and guidance counselors, from a 60-mile radius of Pittsburgh, attended the event. Engineering Professors presented information about different engineering disciplines, along with providing interesting engineering-related activities for the students to complete. SWE student members participated in a panel about life as a college engineering student.

Contact: Hilda Diamond
Email: hd01@andrew.cmu.edu
Site: <http://swe.cit.cmu.edu/>
Phone: (412) 268-2521

Tartan Basketball Camp / Basketball Clinics

Basketball day camp for boys and girls ages 6-14. Also, CMU athletic department employees teach basketball to grade school students through Mt. Lebanon Park & Recreation.

Contact: Tony Wingen
Email: aw30@andrew.cmu.edu
Phone: (412) 268-2218

The Outreach Roadshow

The School of Computer Science Outreach Roadshow is a presentation aimed at broadening understanding of Computer Science and diversifying the images of the field and the people in it. The Roadshow, developed by Women@SCS, introduces children, teachers and parents to the many areas within computer science. This is a highly interactive presentation given by undergraduates and graduates in the School of Computer Science at Carnegie Mellon.

Contact: Dr. Carol Frieze
Email: cfrieze@cs.cmu.edu
Site: <http://women.cs.cmu.edu/What/Outreach/>
Phone: (412) 268-9071

The Pre-College Programs

Advanced Placement Early Admission (APEA):

This is a challenging credit-bearing program in which students take regular Carnegie Mellon classes for full credit. The credit can be used at Carnegie Mellon or may be transferred to other universities for advanced placement. APEA students typically choose two courses from a variety of subjects.

The Fine Arts Programs:

Architecture

The Pre-College Architecture Program is an opportunity for students to explore architecture and to determine their level of interest for further study at the college level. The program includes both a classroom and a studio component, and several field trips in the Pittsburgh area.

Art

The Pre-College Art Program introduces students to the spirit and substance of the School of Art's undergraduate curriculum. It's designed as a preparation for applying to and working within a college art program. The summer includes a variety of studios and an art history component.

Design

The Pre-College Design Program is for students interested in graphic or industrial design. Students from all skill levels, including those who have no design experience to those who are pursuing design careers, will find this program valuable. The program includes studio and classroom work as well as individual and group critique sessions.

Drama

Carnegie Mellon's Pre-College Drama Program gives students the chance to participate in a professional training program with three options: acting, musical theater and design/technical production. The program focuses on the exploration of a conservatory training program with emphasis on creativity, craft and discipline.

Music

The Pre-College Music Program offers a unique taste of the life of student musicians at Carnegie Mellon. Each student follows an individual schedule designed to meet specific needs and interests, including private study with outstanding studio teachers, introduction to state-of-the-art music technology and numerous performance opportunities.

Contact: Office of Admission Pre-College Programs
Email: precollege@andrew.cmu.edu
Phone: (412) 268-2082
Fax: (412) 268-7838
Address:
Carnegie Mellon University SMC 4537 5032 Forbes Avenue
5000 Forbes Avenue
Pittsburgh, PA 15213-3890

Tutoring at Colfax K-8 School

The Gelfand Center hires Carnegie Mellon students who serve as tutors for students in grades 3-8 at Colfax School in Squirrel Hill. We provide bus transportation to and from the school. Tutors must be available on DAYS TO BE PROVIDED ON AUGUST 21 from 2:45-4:45. Tutors must have strong communication skills.

Contact: Kristin Lavery
Email: klavery@andrew.cmu.edu
Phone: (412) 268-6819

Tutoring at Pittsburgh Science & Technology Academy

The Gelfand Center hires Carnegie Mellon students who serve as tutors for students in grades 6-12 at Pittsburgh Science & Technology Academy in Oakland. We provide bus transportation to and from the school. Tutors must be available at least 2 days/week from 10:30 until noon or 10:30 until 12:20.

Contact: Kristin Lavery
Email: klavery@andrew.cmu.edu
Phone: (412) 268-6819

TutorNet

TutorNet is a volunteer organization at Carnegie Mellon University committed to providing sustained educational support to Pittsburgh schools through a combination of classroom and on-line tutoring. We are currently volunteering at Schenley High School, working with students in introductory science courses as well as helping seniors prepare for the International Baccalaureate exams in Biology, Chemistry, and Physics. As a part of the TutorNet program, CMU students do classroom tutoring in these subjects at Schenley. In addition, we have started an on-line program in Physics that provides students with homework help in the evenings. Students are able to log-in from their home computers and discuss their work with a tutor in an on-line chat environment. The combination of classroom and on-line interactions provides Pittsburgh high school students with additional support in mastering the material in science classes. We also try to instill a sense of excitement about science and to get students to consider studying science or engineering in college.

Contact: Professor Washburn
Email: washburn@andrew.cmu.edu

Women@SCS - Outreach Roadshow

This is a presentation by a group of women undergrads and grads in the school of Computer Science at Carnegie Mellon who talk about their early thoughts on Computer Science, why/how they began studying the area, their current experiences, what Computer Science means to them now, and their future hopes and expectations. The presentation includes a slide show, Q and A interaction, and a simple demo. Finally the children are invited to participate in an email pen-pal group organized online through the Women@SCS web site: <http://www.cs.cmu.edu/~women>. The goal of the Roadshow is to challenge some of the stereotypes surrounding the field of computer science and the people in it.

Contact: Carol Frieze
Email: women@scs.cmu.edu
Site: <http://women.cs.cmu.edu/>
Phone: (412) 268-9071