

A **free** professional development experience
for computer science teachers

Two workshops sponsored by the
SIGGRAPH Education Committee

to occur in conjunction with the annual
ACM SIGGRAPH 2013 conference

Sunday July 21, 2013

Hilton Anaheim Hotel Anaheim, California

9:00 – 12:00

PROCESSING as Intro to CS

teaching Java programming
through art and game creation:

- Java based language
- Intuitive graphics
- Labs and examples

Fast forward through a 6 week introductory programming course designed for a high school classroom. Loops become explorations in structure and randomness. Events handling become controls for sprite-based games. Graphics libraries provide a study in data types and method overloading. Laptops required.

1:30 – 5:00

DRAWING MACHINES

embedded programming with a
twist of studio art:

- Arduino embedded microcontroller
- electronic components
- art supplies

Physical computing is the interfacing of computer hardware with sensors and actuators to interact with the environment. Wire basic electronic circuits. Understand the difference between digital and analog signals. Be creative with light sensors, potentiometers, LEDs and servo motors to create machines that create art. Arduinos and electronics provided for use in workshop. Laptops required.

Registration Details

The workshops are free but registration is required. You may register for one or both. A limited number of complimentary SIGGRAPH registrations are available to those able to stay additional days.

Visit www.buildingsteam.org to register.

WHAT:

Workshops offered free to computer science educators in coordination with the ACM SIGGRAPH 2013 conference.

Registration required. Laptops required. Software download required in preparation. Arduinos, electronic components, art supplies provided.

WHERE:

Marriott Anaheim Hotel
700 W Convention Way Anaheim, CA 92802
(714) 750-8000

WHEN:

Sunday, July 21, 2013 Anaheim, CA 9:00 – 5:00

WHEN:

Morning Workshop: Processing for HS 9:00 - 12:00

Processing as Intro to CS: Teaching Java programming through art and game creation. This course is especially designed for the high school computer and covers the first 6-8 weeks of an existing course. Participants will receive materials for use in their own classrooms including labs, example code, learning objectives and grading rubriks. Laptop Required.

Afternoon Workshop: Drawing Machines 1:30 - 4:30

Drawing Machines: This is a course in basic electronics and microcontroller programming using the Arduino and its C-like software development environment in a non-traditional way that emphasizes the aspects of physical computing. It is suitable for an introductory computer science course in high school. A limited number of Arduinos and electronic components are available to use for the workshop duration. Laptop required.

BONUS:

The ACM SIGGRAPH 2013 conference occurs Sunday, July 21-25 at the Anaheim Convention Center.

July 21-22 is scheduled to include many Education focus activities.

A limited number of registration to SIGGRAPH 2013 are available to qualifying workshop participants able to extend their time in Anaheim.

INTEREST LIST:

Those unable to attend the workshops in person but wishing to receive materials and notices of future similar events are requested to complete a form at www.buildingsteam.org .