

## **Citizen Science in the NGSS Classroom: Using Microcontrollers for Data Collection and Analysis - CANCELLED**

NGSS at all grade levels includes a strong emphasis on science and engineering practices (thinking and acting like a scientist or engineer) and understanding and developing solutions for human impact on environment. By the secondary level, using technology to gather information and develop solutions is also emphasized. Citizen science is an excellent vehicle for incorporating these different elements of NGSS into lessons and units while also empowering students and giving them a sense of purpose in their learning and investigation. Microcontrollers like the Arduino and Raspberry Pi make it easy for students to become citizen scientists. During this workshop, you will learn how to build data collection devices such as a school weather station, an air quality monitor, a connected birdhouse, or a wildlife camera that can be applied to NGSS lessons in your context. Come learn the potential of these tools and how to build and use them. You will leave with lesson ideas and a device of your own.

**You must select CHECK or CREDIT CARD to complete this registration.  
(Purchase orders are not accepted for this event.)**

**Check (paid by you or your district/school):** After you register you will receive a confirmation / invoice. If you are paying for the event yourself, print your confirmation / invoice, attach your check, and mail as indicated. If your district/school is paying for the event, please forward your confirmation to the appropriate person so that a check can be processed.

**Credit card (PayPal):** You must enter credit card information at the time of registration. If you are being reimbursed for this event, follow your district/school guidelines for reimbursement.

**If you do not receive a confirmation / invoice within 24 hours, your registration is not complete. Please call the registration contact listed below for assistance.**

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**When** Wednesday, February 8, 2017  
8:30am - 3:00pm

**Location** SCOE, Design Lab

**Presenter** From the Sonoma County Office of Education:  
Casey Shea, Maker Education Coordinator  
Matt O'Donnell, Tech Innovation Specialist  
Anna Van Dordrecht, Science Coordinator

**Cost** \$50.00

**Audience** 6-12 educators and administrators

**Registration** [http://scoe.org/pub/htdocs/class.html?class\\_id=6854](http://scoe.org/pub/htdocs/class.html?class_id=6854)  
Connie Anderson, (707) 524-2823, canderson@scoe.org

**Questions** Matt O'Donnell, (707) 524-8419, modonnell@scoe.org