

*Northwest Missouri State University presents ...*

## **Putting the Fun in CS Fundamentals: A Coding Workshop for the (Very) Busy School Teacher**

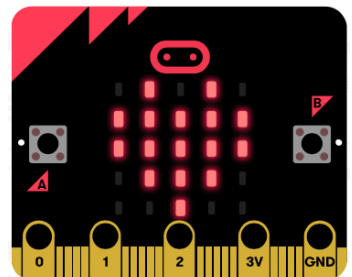
**What:** A 4-day, action-packed workshop covering *coding*, *website creation*, *micro:bits*, and the big ideas of Computer Science, so you can prepare your students (and yourself!) for the 21st century workforce.

**When:** June 18-19, 25-26, 2018, 9 AM - 4 PM

**Where:** Northwest Missouri State University, Maryville, MO

### **Why (for students):**

- Problem solving skills: Coding and creation help students learn to approach problems rationally and systematically
- Jobs, jobs, jobs: In Missouri there are 10,389 *open* computing jobs (4.0x the state average demand rate) for 1,138 computer science graduates



### **Why (for teachers):**

- Personal satisfaction: Make a positive difference in students' lives
- Networking: Meet up with like-minded, dedicated teachers
- Personal Growth: Learn new skills from expert instructors
- Credit: Optional 1-2 hours grad credit from Northwest (\$75/hour)  
Professional Development Certificate available online
- Scrumptious Meals: Lunch and snacks provided!
- The workshop is 100% free of charge, thanks to Google!



### **For More Information:**

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**Registration: [bit.ly/csfundamentals](https://bit.ly/csfundamentals)**



## Details, Details, Details:

**Workshop Agenda:** Each day you will have a hands-on introduction to a new technology; work through entertaining exercises suitable for your students; develop lesson plans (in pairs); and then test-drive your lesson plans by teaching them to your peers.

**Beginning Track:** This track — featuring **Scratch**, **micro:bits**, **web development (html/css/JavaScript)**, **EarSketch** and **Hour of Code** — assumes absolutely *no* background: we will literally start from scratch, and our goal is to provide a gentle introduction to these topics. All of the presenters have extensive experience working with teachers and so are attuned to your needs.

**Advanced Track:** If you have attended our previous workshops, or have prior experience, we will provide an immersive introduction to **Python**, a versatile, novice-friendly programming language that is all the rage. If demand warrants, we will also include some advanced Scratch/micro:bits/web/EarSketch material.

**Code.org Track:** Especially geared to K-5 teachers, this track will include beginning track topics, but concentrate on [code.org](https://code.org)'s free, and frequently-updated, activities and resources to teach CS topics in the lower grades.

**All Tracks:** Both tracks will include an entertaining introduction to the "7 Big Ideas of Computer Science", a framework for teaching CS in the schools. During lunch breaks we will be provide you with an opportunity to network, as well as short demos of cutting edge technologies (including Virtual Reality and Internet of Things).

**About Your Presenters:** Your presenters have a large number of years teaching beginning computer science to university students and school teachers, and appreciate the time and financial constraints in which you work. We also are fully-seized of the need to let you explore and experiment, and not just flood you with facts: for each topic we build in ample time for you to work through exercises.

