



**Bootstrap**  
+ computing creatively  
+ thriving mathematically

Bootstrap is a curricular module for students ages 12-16, which teaches algebraic and geometric concepts through computer programming.



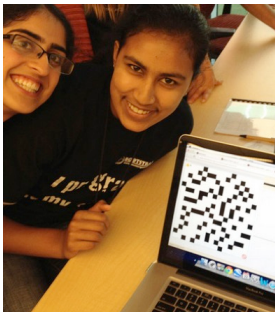
### **Algebra is the foundation for STEM careers.**

Algebra and computing underlie many 21<sup>st</sup> century careers, and success in algebra is critical to students' HS graduation, college enrollment, and earning potential. Unfortunately, many students disengage with math over frustrations with algebra and few schools offer meaningful computing classes. Improving these two skills are critical national challenges, yet schools must often choose when allocating scarce resources between math enrichment or computing.



### **Have your cake, and eat it too.**

Bootstrap improves student performance on standard algebra tasks, by teaching students to program their own videogames using an innovative approach to programming. Our explicit connection to algebra is unique among programming tools for beginners. In fact, most programming tools implicitly contradict algebra education! In addition, our materials go beyond videogames to let kids write smartphone and web apps using the same computer science skills.



### **A full curriculum, aligned to the Common Core, for all students.**

We provide a complete curriculum, student materials, software, and teacher-training workshops. Our lessons are aligned to the Common Core, and we continually assess our impact on student math achievement. Bootstrap has been used in middle- and high-school math classes, IT/CS classes, media classes and afterschool programs. And since every student takes algebra, Bootstrap reaches *all* students – not just those who self-select by race, gender, or income.

Tens of thousands of students around the country have found success with Bootstrap. We offer trainings for professional educators, as well as support and opportunities for volunteers who want to teach in after-school programs.

To learn more visit [www.bootstrapworld.org](http://www.bootstrapworld.org) or e-mail us at [info@bootstrapworld.org](mailto:info@bootstrapworld.org)



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**In this three-day workshop, you will...**

- See the curriculum in action, taught by master teachers
- Explore the research behind Bootstrap
- Investigate the cognitive challenges for students struggling with algebra
- Experience the curriculum from a student's perspective, and leave with a videogame that you've created!

**REGISTER HERE:**  
[bit.ly/BootstrapMN](http://bit.ly/BootstrapMN)

**February 23-25**

8:30 am – 4:00 pm

**TIES Event Center**

Hamline Room

1667 Snelling Ave. N

St Paul, Minnesota 55108

A registration fee of \$50/teacher covers take-home materials and 21 hours of professional development



In Partnership with TIES



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