

1200 - Open Source Safe Cracking Robots - Combinations Under 1 Hour! (Is it bait? Damn straight it is.)

Friday at 12:00 in Track 2

45 minutes | Demo, Tool, Exploit

Nathan Seidle*Founder, SparkFun Electronics*

We've built a \$200 open source robot that cracks combination safes using a mixture of measuring techniques and set testing to reduce crack times to under an hour. By using a motor with a high count encoder we can take measurements of the internal bits of a combination safe while it remains closed. These measurements expose one of the digits of the combination needed to open a standard fire safe. Additionally, 'set testing' is a new method we created to decrease the time between combination attempts. With some 3D printing, Arduino, and some strong magnets we can crack almost any fire safe. Come checkout the live cracking demo during the talk!

Nathan Seidle

Nathan Seidle is the founder of SparkFun Electronics in Boulder, Colo. Nathan founded SparkFun in 2003 while an undergraduate student studying electrical engineering. After building the company across 14 years to over 130 employees he now heads the SparkX Lab within SparkFun, tinkering, hacking and building new products.

Nathan has built a large catalog of off the beaten path projects including a 12' GPS clock, a wall sized Tetris interface, an autonomous miniature electric bat-mobile, a safe cracking robot, and a hacked bathroom scale to measure the weight of his beehive. He believes strongly in the need to teach the next generation of technical citizens.

Nathan is a founding member of the Open Source Hardware Association. He has served on the board of OSHWA and continues to promote and serve the organization. Nathan has been invited to the White House to participate in discussions around intellectual property policy and patent reform and attended multiple White House Maker Faires. Nathan has spoken in front of Congress on copyright and trademark policy. He has presented on the many facets of manufacturing and open hardware at the National Science Foundation, Google, and Sketching in Hardware. Nathan has guest lectured at numerous institutions including MIT, Stanford and West Point Academy.

In their off time, Nathan and his wife Alicia can be found making rather silly electronics projects together for their local Public Library, their nieces and nephews, and Burning Man. Nathan and Alicia live in Boulder, Colorado with their pet tree Alfonso.

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#defcon25/by_track/track2/friday

#defcon25/By_Day/_Friday