

CTF Practice

Getting Started

LiveOverflow (<http://liveoverflow.com/index.html>)

Probably the best resource to get started. LiveOverflow runs a YouTube channel that goes through different hacking challenges and explains things from the ground up for people with little to no hacking experience. Heard about a big hack in the news? LiveOverflow also takes those and explains how those attacks work so that you can understand it as well.

The 'CTF Field Guide' (<https://trailofbits.github.io/ctf/>) and **CTF WTF** (<https://ctftime.org/ctf-wtf/>)

"What's a CTF? How do I start?" These site can give a beginner some quick pointers on how you might start to learn hacking and cyber security topics.

CTF Writeups (<https://github.com/ctfs>)

Found an old security competition/CTF and want to know how the problems were solved? This is a huge community-driven collection of write ups to CTF competition challenges for the past several years. Just don't rely on them too much - the more you try the problems yourself and the less you rely on the writeups, the better you'll get!

CTFTime: CTF Competitions (<https://ctftime.org/>) This website keeps track of past, ongoing, and future CTF competitions and the teams that compete in them. The majority of these competitions may not be beginner-friendly, but many teams take the time to make write-ups of problems, which may be more useful for someone trying to learn how to think about these problems.

Security Creators (<https://securitycreators.video/>) A randomized list of security video creators/streamers, information about the type of content, and where/when to watch.

CTF Radiooo (<https://www.youtube.com/channel/UC-aOX0H7RXOrxzzJjWb17lg>) A CTF podcast with teachers, creators, competitors and more from around the CTF community!

Beginner-Friendly Practice

Some competitions I think may be relatively beginner-friendly.

- **picoCTF** (<https://picoctf.com/>) : **picoCTF 2018** (<https://2018game.picoctf.com/>) and **picoCTF 2019** (<https://2019game.picoctf.com/>) ; also **picoCTF primer** (<https://primer.picoctf.com/>) learning resources

- [247ctf](https://247ctf.com/) (<https://247ctf.com/>)
- [CSAW HSF](https://hsf.csaw.io/) (<https://hsf.csaw.io/>)
- [EasyCTF](https://www.easyctf.com/) (<https://www.easyctf.com/>)
- [HSCTF](https://hsctf.com/) (<https://hsctf.com/>) : also check out the [HSCTF3 practice problems](https://jacobedelman.gitbooks.io/hsctf-3-practice-problems/content/) (<https://jacobedelman.gitbooks.io/hsctf-3-practice-problems/content/>)
- [angstromCTF](https://angstromctf.com/) (<https://angstromctf.com/>)
- [RuSecure CTF](https://www.radford.edu/content/csat/home/itec/rusecure-ctf-contest.html) (<https://www.radford.edu/content/csat/home/itec/rusecure-ctf-contest.html>)
- [PACTF](https://2019.pactf.com/) (<https://2019.pactf.com/>)
- [MetaCTF](https://www.metactf.com/) (<https://www.metactf.com/>)
- [CyberPatriot](https://www.uscyberpatriot.org/Pages/Announcements/CyberPatriot-X-Competition-Timeline.aspx) (<https://www.uscyberpatriot.org/Pages/Announcements/CyberPatriot-X-Competition-Timeline.aspx>)

Binary Exploitation Practice

- [Pwnable.kr](http://pwnable.kr) (<http://pwnable.kr>)
- [OverTheWire](http://overthewire.org/wargames/) (<http://overthewire.org/wargames/>)
- [Gracker](http://gracker.org/) (<http://gracker.org/>)
- [SmashTheStack](http://smashthestack.org/) (<http://smashthestack.org/>)
- [Microcorruption](https://microcorruption.com/login) (<https://microcorruption.com/login>)
- [Pwnable.tw](https://pwnable.tw/) (<https://pwnable.tw/>)
- [Exploit Exercises \(VulnHub mirror\)](https://www.vulnhub.com/series/exploit-exercises,11/) (<https://www.vulnhub.com/series/exploit-exercises,11/>)
- [Pwnable.xyz](https://pwnable.xyz/) (<https://pwnable.xyz/>)

Reverse Engineering Practice

- [Reversing.kr](http://reversing.kr) (<http://reversing.kr>)
- [NetGarage](https://io.netgarage.org/) (<https://io.netgarage.org/>)
- [Challenges.re](https://challenges.re/) (<https://challenges.re/>)

Web Exploitation Practice

- [Websec.fr](http://websec.fr/) (<http://websec.fr/>)
- [Webhacking.kr](http://webhacking.kr) (<http://webhacking.kr>)
- [OWASP Juice Shop](https://owasp.org/www-project-juice-shop/) (<https://owasp.org/www-project-juice-shop/>)
- [XSS Payloads Training](http://www.xss-payloads.com/tools-list.html?t#category=training) (<http://www.xss-payloads.com/tools-list.html?t#category=training>) / [XSS Payloads Twitter](https://twitter.com/XssPayloads) (<https://twitter.com/XssPayloads>) : posts links to XSS challenges; also lists excellent XSS/web exploitation resources
- [PortSwigger Web Security Academy](https://portswigger.net/web-security) (<https://portswigger.net/web-security>)
- [Hacker101 CTF](https://ctf.hacker101.com/ctf) (<https://ctf.hacker101.com/ctf>)

- [Google XSS Game](https://xss-game.appspot.com/) (https://xss-game.appspot.com/)
- [Damn Vulnerable Web App](http://www.dvwa.co.uk/) (http://www.dvwa.co.uk/)
- [Google Gruyere](http://google-gruyere.appspot.com/) (http://google-gruyere.appspot.com/)
- [HackThisSite](https://www.hackthissite.org/) (https://www.hackthissite.org/)
- [bWAPP](http://www.itsecgames.com/) (http://www.itsecgames.com/)
- [WebGoat](http://webappsecmovies.sourceforge.net/webgoat/) (http://webappsecmovies.sourceforge.net/webgoat/)

Cryptography Practice

- [CryptoHack](https://cryptohack.org/) (https://cryptohack.org/)
- [Cryptopals](https://cryptopals.com/) (https://cryptopals.com/)

Mobile Practice

- [Android App Reverse Engineering 101](https://maddiestone.github.io/AndroidAppRE/) (https://maddiestone.github.io/AndroidAppRE/)
- [awesome-mobile-CTF](https://github.com/xtiankisutsa/awesome-mobile-CTF) (https://github.com/xtiankisutsa/awesome-mobile-CTF)

Pentesting

- [Hack The Box](https://www.hackthebox.eu/) (https://www.hackthebox.eu/)
- [CyberSecLabs](https://www.cyberseclabs.co.uk/) (https://www.cyberseclabs.co.uk/)

Mixed Practice

- pwn.college (https://pwn.college/)
- [CTFLearn](https://ctflearn.com/) (https://ctflearn.com/)
- [Root-me](https://www.root-me.org) (https://www.root-me.org)
- [CSAW365](https://365.csaw.io/) (https://365.csaw.io/)
- [VulnHub](https://www.vulnhub.com/) (https://www.vulnhub.com/)
- [Hacker.org](http://www.hacker.org/challenge/) (http://www.hacker.org/challenge/)
- [Hax.tor](http://hax.tor.hu/welcome/) (http://hax.tor.hu/welcome/)
- [Ringzer0](https://ringzer0team.com/challenges) (https://ringzer0team.com/challenges)
- [Hellbound Hackers](https://www.hellboundhackers.org/) (https://www.hellboundhackers.org/)
- [Vulnhub](https://www.vulnhub.com/) (https://www.vulnhub.com/)
- [W3Challs](https://w3challs.com/) (https://w3challs.com/)
- [Hacker Gateway](https://www.hackergateway.com/) (https://www.hackergateway.com/)
- flaws.cloud (http://flaws.cloud/) - common AWS security issues
- flaws2.cloud (http://flaws2.cloud) - more common AWS security issues

Various Other Challenge Sites

(Huge list at [captf](http://captf.com/practice-ctf/) (<http://captf.com/practice-ctf/>) + [wechall](http://www.wechall.net/sites.php) (<http://www.wechall.net/sites.php>) + some I practice with.)