



THREAT RESEARCH CENTER

WhiteHat Academy

Training Grounds for Application Security Excellence

Every engineer hired into the Threat Research Center (TRC) goes through a program to equip them with the technical and troubleshooting skills necessary to identify vulnerabilities in web applications and deliver production-safe proofs of concept. The Academy curriculum is designed for a software or network engineer with no prior background in web security to become an expert in testing over one hundred different types of vulnerabilities.

Academy training begins with the fundamentals of web technology. Engineers come out of their first week with solid knowledge on how client-server communication works, from TCP/IP protocols down to each individual component of request and response structure. Next the student is trained on the bread-and-butter tools used in penetration testing such as proxy software, different virtual environments for hacking, and WhiteHat's own suite of internally-developed tools and interfaces.

Specification by Role and Responsibility

- DAST configuration specialists
- SAST configuration specialists
- Mobile configuration specialists
- Vulnerability verification specialists
- Penetration Testers

DAST, SAST, and Mobile configuration specialists are trained to maximize coverage and maintain optimal scan health. The engineer learns to identify all points of inefficiency in a scan, then troubleshoot and swiftly resolve the problem. To customize for the unique applications we scan, the engineer is trained on authentication processes, reviewing application forms before the scan performs code injection tests, configuring additional entry points, and best practices in technical support for customers.

“**Having no false positives, and engineers available for in-depth explanation of our vulnerabilities, has been invaluable.**”

Raymond Pompon - Linedata

“**WhiteHat has the validation if the vulnerability that's discovered is a false positive or not, and that's extremely powerful for us since we're a small group focused on building software securely.**”

Blue Lava Consulting

Vulnerability Verification specialists delve into both theoretical and practical training on all classes of vulnerability identified by WhiteHat, with particular emphasis on advanced techniques for filter evasion using examples of current, real-world exploits. During this period the engineer tests a variety of different web architectures, frameworks, languages, browsers, and application functionality. They learn to work in tandem with our automated scanning technology to quickly deliver accurate, unique, and production-safe proofs of concept to our clients in the Software-as-a-Service cloud solution.

Penetration Testing

Only the most senior engineers move on to business logic assessments, helping refine the creativity and technical chops required to perform manual penetration testing. Here is where an engineer learns to creatively assemble the “what if” scenario in full, working through all possible scenarios for web or mobile applications according to their area of specialty.

Rigorous Examinations

At the end of eight weeks in WhiteHat Academy, the engineer is given a thorough examination of practical and theoretical knowledge, skills, and situational awareness. If they pass, they become fully-functional team members and trusted security advisors to our customers. But even after graduation, our engineers never cease to hone their craft. At WhiteHat Security, we encourage individual research, lab access and creativity, thoughtful discussion, and the practice of free information sharing across our team of experts around the globe.

KEY BENEFITS

Complete Verification:
all application vulnerabilities are reviewed and confirmed by the TRC engineers

Configuration:
Hand-crafted scans are safe for a production environment, or can be set more rigorous for test

Consistency:
All the engineers learn on the same tools, with the same class materials, creating a consistent experience

Remediation Advice:
Where applicable, engineers can provide reliable remediation advice for code fixes



About WhiteHat Security

WhiteHat Security combines advanced technology with the expertise of its global [Threat Research Center](#) team to deliver application security solutions that reduce risk, reduce cost and accelerate the deployment of secure applications and web sites. The company's flagship product, [WhiteHat Sentinel](#), provides dynamic, static and mobile application security testing.

