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Ethical Hacking

Assignment

The primary purpose of ethical hacking courses is to enhance students understandings of attacks and attackers, equipping them to defend systems effectively. However, the article acknowledges concerns that teaching offensive hacking skills might inadvertently encourage students to engage in illegal activities, posing risks both to society and the students themselves.

To address these risks, ethical hacking programs often incorporate education on ethics and law alogside technical training, fostering frameworks for ethical decision-making. The research in the article includes interview with 206 information security professionals, who provided insights and recommendations to help minimize potential harms while maximizing the educational benifits of such courses. The study identifies four key cybersecurity competitions, recognizing achievements in ethical hacking, and ensuring ongoing skills development.

The importance of peer groups and social interactions is emphasized, as they help students build communities aligned with white-hat hacking practices and lawful behaviour. Competitions serve as a practical tool to expose students to real-world scenarios, reinforcing ethical

principles while providing networking opportunities with industry professionals. Recognition, such as leaderboards or accolades for ethical hacking achievements, can satisfy students desire for acknowledgment, reducing the appeal of black-hat activities. Furthermore, offering progressively challenging tasks ensures students remain engaged and motivated while deterring unethical behaviour.

The article concludes by highlighting the critical role educators play in preparing students to apply their hacking skills ethically. By integrating ethics into the circullam and implementing the proposed strategies, academic institutions can balance the benefits of teaching ethical hacking with the responsibility to protect students and society. This approach underscores the necessity of embedding ethical considerations deeply within cybersecurity education to mitigate risks and promote the responsible use of hacking skills.