



BA/MA/SA/Group/Lab:

Secure Online Gaming – A Myth?

Playing games online has become a favorite pastime for millions of people. All sorts of different games, from classic board or card games to first-person shooters or role playing games, are available on the Internet. Over the last couple of decades, online gaming has become a global industry worth billions.

A survey from 2009, for example, states that more than 10 million Americans play online poker for money. In 2010, poker revenues alone reached almost 7 billion US dollars. However, the *Great British Poker Survey* discovered in 2011 that more than 50% of the participants mistrust online poker websites. We think that it is important to address this trust issue from an academic point of view by studying potential conceptual weaknesses in online gaming platforms.



The goal of this project is to decide on a certain online gaming platform and inspect its security mechanisms thoroughly to identify possible flaws. The severity of these deficiencies should then be demonstrated by designing comprehensive and custom-tailored exploits.¹

Requirements: Good programming skills (preferably in Java) and a keen interest in online gaming. A background in distributed systems is desirable and knowledge of game theory is an advantage. The student(s) should be able to work independently on the topic.

Interested? Please contact us for more details!

Contacts

- Tobias Langner: tobias.langner@tik.ee.ethz.ch, ETZ G61.4
- Thomas Locher: locher@tik.ee.ethz.ch, ETZ G64.2

¹Note that we are not interested in exploiting technological weaknesses such as bugs in aged software, but rather conceptual, game-theoretic weaknesses of such platforms.