

# **SANReN Cyber Security Challenge 2023**

## **Sponsorship Opportunities**



# Cyber Security Challenge 2023



## Overview

The National Integrated Cyber Infrastructure System (NICIS), which comprises of the Centre for High Performance Computing (CHPC), the South African National Research Network (SANReN) and the Data Intensive Research Initiative of South Africa (DIRISA) will be hosting the CHPC National Conference in November/December 2023. At this conference, SANReN will host the seventh annual Cyber Security Challenge (CSC) competition. The purpose of the competition is to stimulate interest in Cyber Security in general, but more specifically in the field of Network Security within Southern African Tertiary institutions. Therefore, this competition is aimed at university students who are interested in information security fields such as penetration testing, incident response, digital forensics, cryptography, and cyber security training.

The annual Cyber Security Challenge competition will consist of:

- A jeopardy-styled Capture the Flag (CTF) event that will test the problem-solving skills of participating teams by requiring them to complete challenges that replicate real-world scenarios. The challenges include binary exploitation, cryptography, web exploitation, reverse engineering, digital forensics, and mobile phone security.
- An attack/defend system for team vs. team battles. Here every team has their own system that consists of dedicated preconfigured hardware and software. In the attack/defence competition, the teams must hack each other but also fix vulnerabilities in their own system (through patching).
- A unique challenge that provides students with the opportunity to experience and attempt a social engineering attack in a safe and ethical way.
- An additional bonus hacking challenge.

The key benefit of the CSC is the opportunity for university students to receive exposure to current and trending cyber security topics. Such exposure will stimulate interest in the field of cyber and information security, growing the next generation of ethical hackers. Additionally, during the competition, the students may discover new 0-day vulnerabilities. These vulnerabilities can then be negated before they can be used by malicious hackers. Finally, the CSC competition offers an opportunity to discover innovative thinkers and identify cyber security specialists in the making.

Due to the high interest among students, the CSC competition is divided into two rounds. The qualifier rounds allow students from universities across Southern Africa (including Botswana, Namibia, Eswatini, Malawi and Lesotho) to compete for positions in the final. Upon completion of the qualifier rounds, the top teams will be invited to represent their university in the CSC final at the CHPC National Conference.



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## Capture the Flag

The main event of the CSC competition is a CTF challenge, which is designed to test students' abilities in a wide range of cyber security skills. The CTF will be composed of a variety of challenges that includes binary exploitation, cryptography, web exploitation, reverse engineering, forensics, and mobile phone security.

## Attack/Defend Challenge

The Attack/Defend challenge presents the students with an alternative twist. Teams are given 3 hours to identify and patch all vulnerabilities on their dedicated server, after which teams must penetrate and change banners on opposing teams' server to score points.

## Social Engineering Challenge

Breaching the perimeter security of a network becomes harder each passing day. The modern approach to gain a foothold in a network is to focus on the softer targets: people. The social engineering challenge is awarded to the team that can prove a successful social engineering attack was executed against an opposing team.

## Custom Hacking Challenge

A unique hacking challenge is also presented to test students' skills and abilities.



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## Why Sponsor?

The aim of the CHPC National Conference is to bring together students and professionals in the fields of high-performance computing, big data, and high-speed networking to enable collaboration and communication of work being done. Therefore, the conference provides an excellent opportunity to promote your brand to a wide variety of professionals. Additionally, you will gain direct exposure to students who are interested in cyber and information security during the CSC competition.

For an overview of the 2022 competition, please visit: <https://www.youtube.com/watch?v=AEZadxBgIPQ>

## 2023 Sponsorship Opportunities

We offer a range of sponsorship opportunities designed to meet your needs and resources.

### Podium Sponsorship

Points accumulated across all challenges forming part of the CSC competition will be aggregated following a weighted approach to determine the podium winners. Prizes to be awarded to the 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> placed teams. Teams can be up to a maximum of 4 members.

### 2023 Podium Sponsorship Packages

The CSC competition will give exposure to all podium sponsors through

- Acknowledgement during the CSC 2023 prize giving ceremony during the CHPC National Conference.
- Acknowledgement of the sponsorship on the CSC website.
- Placement of a pull-banner (to be provided) at the conference.
- Placement of sponsor logo on the medals and trophy to be received by the winning team and mentor.

#### 1<sup>st</sup> Place

- *Sponsorship of prizes to the value: R 100k*
- Sponsorship will also include:
  - Presentation opportunity during the CSC 2023 induction session – 15-minute slot.
  - Placement of sponsor logo on the t-shirt to be given to the students (should circumstances allow).
  - 6 conference tickets to attend the CHPC National Conference.

#### 2<sup>nd</sup> Place

- *Sponsorship of prizes to the value: R 60k*
- Sponsorship will also include:
  - Presentation opportunity during the CSC 2023 induction session – 10-minute slot.
  - Placement of sponsor logo on the t-shirt to be given to the students (should circumstances allow).
  - 4 conference tickets to attend the CHPC National Conference.

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## 3<sup>rd</sup> Place

- *Sponsorship of prizes to the value: R 30k*
- Sponsorship will also include:
  - Presentation opportunity during the CSC 2023 induction session – 8-minute slot.
  - Placement of sponsor logo on the t-shirt to be given to the students (should circumstances allow).
  - 2 conference tickets to attend the CHPC National Conference.

As part of podium sponsorships, we are also welcoming internship opportunities for the top placed students.

Finally, training vouchers (e.g., Hack the Box or TryHackMe) as supplementary prizes are also encouraged as such contributions will support us in our quest to build the cyber security pipeline in Southern Africa.

Other forms of in-kind contributions are also accepted, subject to approval by the CSC organizing committee.

## Challenge Sponsorship

Custom hacking challenges are also accepted, offering a unique opportunity to test students' skills and abilities. It is important to note that challenge sponsors have insight and input into challenge development and might be required to form part of the judging panel for challenge winner selection. Sponsors will also be required to provide the technical components required to host the challenge.

The CSC competition will give exposure to all podium sponsors through

- Acknowledgement during the CSC 2023 prize giving ceremony.
- Acknowledgement of the sponsorship on the CSC website.
- Placement of a pull-banner (to be provided) at the conference.
- 2 conference tickets to attend the CHPC National Conference.
- Placement of sponsor logo on the t-shirt to be given to the students (should circumstances allow).

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## International Competition Sponsorship

The eventual aim is for SANReN to sponsor the winning student team to compete in an appropriate international competition, such as the BRICS Future Skills Challenge or the International Cybersecurity Competition, similar to the CHPC's sponsorship of the CHPC Student Cluster Competition winners to participate in the ISC Student Cluster Competition.

This sponsorship entails taking the winning team or top performing students to participate in an international cyber security competition in 2023. The sponsorship will be required to cover the students' flights, accommodation, and registration fees to compete at the event.

*Sponsorship value: R 300k*

## Contact

For any queries or questions, please contact us at [heloise@sanren.ac.za](mailto:heloise@sanren.ac.za) or [csc@sanren.ac.za](mailto:csc@sanren.ac.za)