# Apogee Innovation Challenge

## AIC-2019

**WHAT IS AIC?**
AIC is a unique college event aimed to provide a platform to students to work on real industrial problems while being in the college itself.

**HOW DO I BENEFIT FROM IT?**
Except the enormous amount of experience you gather about the actual working of industry, AIC has lucrative prizes to offer. Get a chance to win huge cash prizes and procure Summer Internships at leading global brands.

# APOGEE INNOVATION CHALLENGE

**NETSKOPE Inc.** is an American software company founded in 2012 that helps companies protect data and protect against threat in cloud application, cloud infrastructure, and the web. It is headquartered in Los Altos, California, with a software development office in Bangalore, India.

Netskope is recognised as a leader in the Gartner Magic Quadrant for Cloud Access Security Brokers.

# Netskope Inc.

## HTTP Traffic Change Detector

**SaaS HTTP traffic keeps changing due to SaaS app vendors making changes in their software and services. Most of the deep packet inspection (DPI) engines rely on traffic pattern based signatures. Frequent changes in traffic pattern impact detection capability of DPI engines. Thus, we need a mechanism to detect such traffic changes as early as possible so as to modify the signatures.**

# Problem Statement

- **Manually monitoring and modifying the signature is a tedious way to solve it.**
- **Better approach is to have a traffic change detector tool to monitor the SaaS traffic and automatically detect the changes in traffic patterns which is relevant to the signature.**
- **Relevant patterns should be accepted as input for the tool as string or regex and detect a change in traffic only in these patterns. Eg: URI PARAM key or value changed, Post data key-value pair changed or missing, etc.**

# How to proceed?

- Solution that is deployable as presented and has production quality code, is easily extensible and passes all test cases: **INR 1Lakh (at most one)**

- Solution which passes reasonable testing guidance, has production quality code and with very little help can be put into use : **INR 50,000 (at most one)**

- Solution that is fair in approach, that follow good software engineering practices and show clear progress toward a solution :**INR 30,000**

# Rewards

- **To register, visit :  www.bits-apogee.org/aic**

- The solutions need to be mailed to aic@bits-apogee.org before 15th March 2019. **In case you are shortlisted, you may improve upon your final presentation.**

- The final presentation will take place in APOGEE 2019 (29th-31stMarch) and the exact date and time will be conveyed at least 24 hours prior.

# Registration Steps

- **Registration closes - 1st March 2019**
- **Initial Submission - 15th March 2019**
- Top 10 shortlisted teams announcement - 20th March 2019
- Video Conferencing Presentation - 29/30/31st March 2019
- Final Result Announcement - 15th April 2019

# Deadlines

- **The solutions presented will be the sole property of NETSKOPE Inc. and it may use it for its own development purposes.**

# Terms and Conditions

SAHIL SINGLA - +91 8920121441

JAYESH NARAYAN - +91 7017173235

Email - aic@bits-apogee.org

# Contact