

INTRODUCTION

Software plays an integral part in our everyday lives because of its near ubiquitous influence in our increasingly technological society. Therefore, taking appropriate steps to applying software testing techniques is of paramount importance. To promote advanced software testing theory, techniques, and tools, IEEE Reliability Society, collaborating with IEEE International Conference on Software Quality, Reliability, and Security as well as other sponsors will host the Third IEEE International Contest on Software Testing on July 23 in Sofia, Bulgaria. Through this contest, we bring real-world testing and tool experience to the contestants and provide excellent opportunities for them to practice their learned testing techniques to overcome industry-testing challenges. We cordially invite you to participate in the contest and win a CASH prize!

REGISTRATION

All interested contestants must send an email to Mr. Linghuan Hu at <u>hulinghuan@gmail.com</u> before July 16. The subject of the email should be "IEEE 2019 ISTC -- Contestant". The content must include the first name, last name, and affiliation.

FORMAT & EVALUATION

All contestants must bring their own laptops. The contest has two parts:

- The first part is a 2-hour tutorial (10:00 12:00). We will help contestants properly configure their laptops, and explain how to use JUnit & Mooctest.net platform. Each contestant is required to have basic knowledge about Java programming and JUnit.
- The second part is the contest (14:00 17:00). It is individual based. Each contestant will design test cases with specific input values based on the given source code and specification to test a few Java programs. The quality of test cases will be measured by the code coverage (statement and branch) and mutation score achieved. If test cases from multiple contestants achieve the same coverage, contestants with fewer test cases have a higher ranking than those with more test cases.

PLATFORM & CONFIGURATION

Laptops used for this contest must have the following software installed:

- Windows 7 or later versions
- Java JDK 1.7 (cannot be other JDK versions)
- Eclipse Luna (cannot be other Eclipse versions)
- We will help contestants configure their laptops during the Tutorial session.

AWARDS

The first place receives a cash prize of \$300 USD, followed by the 2nd for \$200 USD, and five 3rd places each for \$100 USD. Every contestant will receive a certificate of completion from the IEEE Reliability Society and the QRS conference.

CONTEST VENUE

The Contest will be held at the University of Sofia, Bulgaria.

Important Dates • July 16, 2019: Application deadline • July 23, 2019: Tutorial & Contest Sponsors • EliabilitySociety • Society • Soci