DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Department of Computer Science & Engineering, NIT, Rourkela was established in 1982. Since its inception, the Department is under dynamic progress and is able to establish the reputation for imparting quality education both at undergraduate and graduate programmes. The department has well equipped modern laboratories such as Software Engineering, Distributed Object Systems, Information Security & Data Communication, Image Processing & Cluster Computing and Advanced Database Engineering Labs for pursuing research keeping in view of the technological advancement.

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7th National Workshop
On
RECENT TRENDS IN SOFTWARE TESTING
(RTST - 2014)
12th – 14th May 2014

Dr. Durga Prasad Mohapatra
Convener

Dr. Suchismita Chinara
Co-Convener

Supported by
TEQIP - II
Department of Computer Science & Engineering
National Institute of Technology
Rourkela-769 008, Orissa
http://www.nitrkl.ac.in
ABOUT THE WORKSHOP

A large number of software fails due to lack of proper testing. Testing is an important activity in the software development process. It takes maximum effort among all the phases. The objective of software testing is to identify all defects existing in the software product. Testing provides a practical way of reducing defects in a system & increasing the user’s confidence in a developed system.

Testing traditional software is relatively easy. But testing of OOPs is very difficult. Though the O-O features such as inheritance, polymorphism, dynamic binding etc. are the greatest strengths of O-O software, but they pose special difficulties in the testing process. So, one has to give special attention while testing O-O software.

In this workshop, the issues related with testing O-O software will be highlighted. The recent trends in testing of O-O software will be presented by eminent experts. Now-a-days, the testing of O-O software is based on design documents such as UML diagrams, rather than the source codes, due to several advantages. So, in this workshop, various UML diagrams and their applications to testing of O-O software will be discussed. Besides this, the participants will be given hands on in O-O software testing using RFT, JaBUTi, TestComplete etc. The participants should have knowledge on Software Testing.

INVITED TALKS

Invited talks will be delivered by experts from IIT, Kharagpur, faculty members of NIT, Rourkela, experts from other sister NITs and experts from industry.

CONTENTS OF THE WORKSHOP

1. OBJECT-ORIENTED TESTING STRATEGIES
   • Unit Testing in the O-O Context
   • Integration Testing in the O-O Context
   • Validation Testing in the O-O Context

2. TEST CASE DESIGN FOR O-O SOFTWARE
   • Fault-Based Testing
   • Scenario-Based Testing

3. TESTING METHODS APPLICABLE AT THE CLASS LEVEL
   • Random Testing for O-O Classes
   • Partition Testing at the Class Level

4. INTERCLASS TEST CASE DESIGN
   • Multiple Class Testing
   • Tests Derived from Behavior Models

5. REGRESSION TESTING

6. MODEL BASED TESTING

7. MC/DC TESTING

8. TESTING OF WEB BASED APPLICATIONS

9. TEST CASE PRIORITIZATION

10. TEST CASE OPTIMIZATION

11. TESTING TOOLS: RFT, TestComplete, JaBUTi, JMeter, Selenium, Jumble etc.

REGISTRATION & FEE PARTICULARS

Applications in the prescribed format and the registration fee as per given below in the form of a DD, drawn in favour of “RTST - 2014, NIT, Rourkela” payable at SBI, NIT Branch, Rourkela-8 (Code-2109) must reach the Convener on or before 28th April 2014. Registration fee includes boarding, lodging and workshop materials.

Employees from Industry and R&D Organizations: Rs.5,000/-
Faculty from Academic Institutions: Rs.2,000/-
Full Time Research Scholars and Students*: Rs.1,000/-

*Limited number of participants will be reimbursed sleeper class to and fro journey fare through the shortest route, on prior request, subject to availability of funds. Research scholars and students of NIT, Rourkela need not pay any registration fee.

7th National Workshop on RECENT TRENDS IN SOFTWARE TESTING (RTST - 2014)
12th – 14th May 2014

Registration Form

1. Name: ___________________________________________
2. Designation: _______________________________________
3. Organization: _______________________________________
4. Specialization: _______________________________________
5. Address: ___________________________________________
6. Accommodation Required: YES/NO
7. Gender: Male/Female
8. Registration Fee Details:
   Amount: Rs. ______________
   DD No: _________________ Drawn on ________________
   Branch………………………………………………………………
9. Place: ____________________________
10. Date: ________________ Signature of the Applicant
   Signature of Sponsoring Authority (With Seal)

Copies of this form can be made, if necessary. Please send the duly filled in form to the Convener on or before 28th April 2014. The details of the workshop & the form can also be downloaded from our website http://www.nitrkl.ac.in.