

# NUST INSTITUTE OF INFORMATION TECHNOLOGY

## MAGGIE:

### MEASUREMENT AND ANALYSIS FOR THE GLOBAL GRID AND INTERNET END-TO-END PERFORMANCE

MAGGIE [[maggie.niit.edu.pk](http://maggie.niit.edu.pk)] is a collaborative research initiative by the Stanford Linear Accelerator Center (SLAC), USA and NUST Institute of Information Technology, Pakistan. The motivation behind the initiative is the need for better and integrated Network Performance Measurement and Monitoring. This includes support for analysis and access to network monitoring data while considering the increasing amount of computing and networking power in the scientific research community. Most of the monitoring tools being developed by team-MAGGIE, derive their data from the PingER [[www-iepm.slac.stanford.edu/pinger](http://www-iepm.slac.stanford.edu/pinger)] project.

- Topological Analysis and Visualization of Network Performance
- Automatic Network Anomaly Quantification
- A software for creating high-level summary plots of PingER data
- Integration of PingER and AMP
- Web based PingER Visualization
- A Ubiquitous PingER Client with support for statistical analysis
- Triangulation Utility for locating IP addresses
- Network Weather Forecasting
- Creation of a web-based infrastructure for PingER management
- Event Diagnosis & Detection

NIIT is extremely proud to have extremely energetic, ambitious, creative yet responsible scholars representing her. The scholars involved relentlessly in making MAGGIE a success and Pakistan proud are: **Adnan Iqbal (PhD student), Asma Shamshad (BIT 4), Faran Javed (BIT 5), Fareena Saqib (BIT 4), Mirza Abdullah Jan (SA Dept), Nauman Shah (BIT 6), Fahad Satti (BIT 6).**

## ACHIEVEMENTS

Shehryar M. Khan and M. Asif Khan proceeded to Stanford Linear Accelerator to continue their research work.

TULIP - IP Geo location tool. By Faran Javed received special appreciation from the judges & guest Of honor at All Pakistan software competition held at GIKI.



**Shehryar M. Khan**



**Asif Khan**



**Faran Javed**

**\*Research positions are open for talented students. Come forth and contribute in nation building\***

Contacts:  
Dr. Arshad Ali  
Executive Bldg, St # 9  
9280658 x 101  
[drarshad@niit.edu.pk](mailto:drarshad@niit.edu.pk)

Umar Kalim  
R # 15, AB # 3, St # 8  
9280439 x 134  
[umar.kalim@niit.edu.pk](mailto:umar.kalim@niit.edu.pk)

Visit MAGGIE at  
[maggie.niit.edu.pk](http://maggie.niit.edu.pk)

