Flow of Presentation

1. Research Themes
2. Projects and Progress
3. Way Forward
Research Themes

- Big Data and IoT
- Cloud Computing
- e-Solutions
- Cyber Security

National Center for Artificial Intelligence

- Approved worth **PKR 1098.3** Millions
- PKR **97.0 Millions** earmarked for Medical Diagnostic Lab at CUI
- **15** Persons already joined the LAB, **14** more to join
- Procurement of equipment already initiated
- **MS in Artificial Intelligence** to be submitted to relevant bodies for approval

Focal Person: **Dr Ahmad Raza Shahid**
ICT4CoP: Levering ICTs for community policing

- Horizon 2020 project with Norwegian Uni of life sciences as lead institute
- Partners from 8 different countries
- Participation and presentation in annual meeting held at Oslo on Sept 2–8, 2018
- Mobile App for community policing being developed with NGO Rozan
- Conducted Seminar in Islamabad in collaboration with Rozan on Nov 7, 2018
- Focal Person: Dr Sajjad A. Madani

Cyber Security

- Data Analytics in Network Security
- T-Eye (threat intelligence platform) in collaboration with Trillium Systems.
- SHEPERD (Container Security Platform) in collaboration with WANClouds Inc. US
- Project worth PKR **120 millions** completed or in progress.
- PKR **14 Millions** (approved recently) under technology development fund for development of cyber threat intelligence platform by HEC
- Focal Person: Dr Masoom Alam
Computer Emergency Response

- In collaboration with Oman National CERT, a proposal was developed and submitted for funding to COMSATS Headquarters, Islamabad.
- COM-CERT will analyze risks and security threats that may be present in cyberspace and communicates this information to users of Internet services and technical information outlets, whether they are public or private institutions, or individuals.
- **Focal Person:** Sohail Asghar

Collaboration with South Centre

- In collaboration with South Center, a joint policy paper was prepared by the following authors:
  **The Fourth Industrial Revolution in the Developing Nations: Challenges and Road Map**
  Sohail Asghar, Manzoor Illahi Tamimmy, Gulmina Rextina & Tanveer Ahmed
  Commission on Science and Technology for Sustainable Development in the South (COMSATS), Islamabad, Pakistan

In August 1995 the South Centre was established as a permanent inter-governmental organization of developing countries.
Hybrid Learning Initiative for e-Education: **Digitize or Die**

- Flexibility in time, space, and pace
- A tailor-made MOOCs, is being developed
- A customized learning management system and Mobile App developed that supports online randomized quizzes, discussion boards, live sessions, and video lectures
- In total **23000+** students registered in **3** courses across **7** campuses to-date.
- Focal person: **Sajjad A Madani**

Conferences/Workshops

- **Frontiers of Information Technology** was held **December 17~19, 2018** in Islamabad
- **Data Science in Practice**: 3rd International Hands on Training Workshop help on **23rd to 27th November 2018**, with trainers from Pakistan, Germany, Netherlands, and UAE. **Focal Person**: Sohail Asghar
- **Frontiers of Information Technology** technically co-sponsored by IEEE Industrial electronics society and IEEE computer society is planned for **December 16~18, 2019** in Islamabad. **Focal Person**: Sajjad A Madani
Publications around the themes [1]


Publications around the themes [2]


Publications around the themes [2]


Way Forward

• Active collaboration to effectively organize the thematic area

• Meeting cum workshop on the sidelines of FIT of the thematic area members in December subject to the provision of funds by COMSATS

• Establishment of center of excellence in cyber security. This is of utmost importance and needs due consideration to counter the current and future threats of the cyber warfare by COMSATS member countries

• Establishment of CoE in IoT and Cloud and Data Science needs consideration
Thank you for your attention!