

5G Research Group at Informatics Institute Istanbul Technical University

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Istanbul Technical University

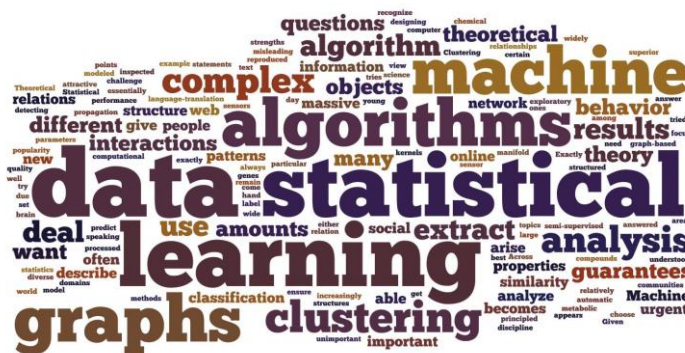
- Founded in 1773, one of the distinguished institutions in Turkey
- Research contributions to scientific development on an international scale
- Preferred by Turkey's most distinguished students since its foundation and has achieved justified respect.
- Graduate studies in 6 Institutes by more than 140 programs.
- 23 Departments with full accreditation by ABET (Accreditation Board for Engineering and Technology).

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Informatics Institute

- A multi-disciplinary initiative to perform research and graduate-level education for the ICT applications in Istanbul Technical University
- 26+ researchers (Professors, PhD, MSc)
- 9 National/3 International running projects
- Expertise in Advanced DSP / Image Processing / Visual Analytics / Data Analytics / Data Visualization / Machine Learning / Data Mining / Statistics / Communications Theory / Microwave / E-health



Contribution Areas



Advanced DSP and Comm. Theory

- Waveform Design
- Multicarrier Modulation and Multi Access Schemes
- Spatial Signal Processing
- Massive MIMO
- Beamforming
- mm-Wave Communications
- Power-awareness and Green Communications



Network

- Wireless Backhaul Networks
- Ultra-dense Small Cell Networks
- Cell Switch off Approaches
- Threat Analysis
- Traffic Patterns
- Performance Analysis
- Resource Management and Optimization
- Security

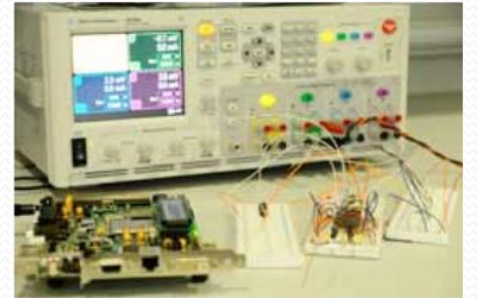


Vertical Sectors and Apps.

- E-health
- Digital-pathology
- Critical Infrastructure
- High Performance Computing
- E-learning

University Research Facilities

- National High Performance Computing Center
- Wireless Communications Research Laboratory
- Electromagnetic Measurement and Imaging Laboratory
- RF Electronics Laboratory



Thank you.

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İTÜ 5G Research Group