

'decentralize, focus, fund, facilitate and motivate to create an enduring research culture'

# PSU'S RESEARCH VISION: TO MARK A FRONTAL POSITION IN THE RESEARCH MAP OF THE UNIVERSITIES IN THE MIDDLE EAST.



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### **PSU RESEARCH THEMES**



## COLLEGES RESEARCH LABS AND RESEARCH GROUPS



#### 1- Security Engineering Lab (SEL)

The Security Engineering Research Lab at Prince Sultan University builds upon the existing strengths of the University and its land-grant mission. It aims to meet the public need for leading-edge cyber security software development and information technology practices. The lab serves the information technology and computing professionals, practitioners, and endpoint users who operate the public and private enterprises. The lab also facilitates the development of new knowledge and methodologies in cybersecurity, advancing the state-of-the-art in the field. It works to disseminate cybersecurity knowledge with a student- cantered approach to training future cybersecurity practitioners, researchers, and educators.

#### 2- Robotics and Internet-of-Things (RIOTU)

- Robotics (mobile robots, drones, cloud robotics, software engineering for robotics, Al Robotics, Planning, Robot Operating System (ROS))
- Internet-of-Things (Communication and Networking for the IoT, Integration of Robots into the IoT, Web Services for Robots)
- Cloud Computing (Cloud Robotics)
- Security and Safety (Security of IoT, Safety of Drones, Security of Cloud Robotics)



#### 3. EIAS Data Science & Blockchain Lab

EIAS Data Science & Blockchain is a responsive, dynamic agile research lab that copes and adapts to the dynamics of information technology and society needs. Members work in teams to perform applied and theoretical research in focus areas as per "cycle" and priorities. The dynamics and philosophy of the lab are encoded in the acronym "EIAS", which stands for "Emerging Autonomous Intelligent Systems". While the current cycle focuses on Data Science and Blockchain, the focus may shift to other specialized areas. Planned research areas include:

- a. Data Science, Big Data and Intelligent Cloud
- b. Decentralized and Autonomous Systems
- c. Deep Learning and Data Driven Intelligence
- d. Holoportation and Mixed Reality
- e. Natural Language Processing
- f. e-Leadership and e-Quality

#### 4- AI & Data Analytics Lab (AIDA)

Al & Data Analytics Lab aims to develop efficient and scalable data processing algorithms. These algorithms and techniques intend to explore and uncover hidden patterns, correlations and other relevant insights in relational, text and network data. The goal is to make solutions applicable to many challenging real world problems in the domain of science, industry and society. Al & Data Analytics can help to meet the challenges of the increasing demand and sustainable future while ensuring the best solutions. The decisive objective is to contribute to the Saudi Vision 2030 initiatives and NTP2020 strategic objectives for the health sector, education field and energy sector in order to support the vibrant digitized society.



