Prairie View A&M University
Capability Statement

Institution: Prairie View A&M University, Prairie View, TX 77446
DUNS No: **138170220**   Cage Code: **1QPCO**   NACIS ID: **611310 561621 236220 221310 541715 541310, 237130**   SIC: **8221**
Federal EIN No: **74-6001078**
Certificates, Registrations, Accreditations: **SACSCOC; CSWE; ADA; NAAB; ACS; AACSB; NCATE; SBEC; CSAC of ABET; EAC of ABET; TAC of ABET; ACEN; CCNE; BON**

POC Information: **Dr. Ali Fares, Interim-Vice President for Research, Innovation & Sponsored Programs**
Address: 700 University Drive, Prairie View, TX 77446;
Tel: (936) 261-1590; email: alfares@pvamu.edu

OVERVIEW
Established in 1876, Prairie View A&M University (PVAMU), a member of the Texas A&M University System, is the second oldest public university and a land-grant institution in Texas. It offers 50 baccalaureate, 35 master's and five doctoral programs. PVAMU has an enrollment of about 8500 students and a 20:1 student to faculty ratio. Its total research expenditure for 2017 is about $ 16 M.

RESEARCH CAPABILITIES
Engineering: Big data and high performance computing , cybersecurity in communication, social networking and virtual environments, secure imaging, AI in cybersecurity, transport processes on porous surfaces, smart grid electromagnetic compatibility and security, multi-dimensional heat transfer in flow channels, lightweight structural composites and matrix resins for thermal stability, biosensors, bio-nanocomposite materials, self-healing nano-metal complexes. Biofuels, wind energy.
Physics: Radiation biology, computational modeling, protons and heavy ions in cancer therapy, space radiation effects on electronic devices, designing of shielding materials, particle pixel detector, dosimetry
Chemistry: Nanomaterials for anti-cancer drugs, metal nanoparticles, graphene, quantum mechanical calculations, charged nano-layers, nanodisks, biomass conversion, renewable polymers
Biology: Functional genomics, stochastic modeling and analysis for biological systems, evidence networks for drug-mediator relationships, early detection of cancer
Mathematics: Signal processing, probability of success and failure of the lifting and landing
Agriculture: water and food security, mammalian embryo technologies, soil moisture sensors, neural network and thermal images for soil moisture estimation, immunoassay analyzer, core microscopy
Health Disparities: Substance use, mental health, juvenile offenses, social biases

FACILITIES
Radiation Institute of Science & Engineering – Leica TCS SP8 confocal laser for live cell imaging; Leica DM IL LED inverted microscope; MultiRad350kV X-Ray Irradiation System; Eddy covariance tower
Center of Excellence in Research and Education for Big Military Data Intelligence - Four NVIDIA DGX-1 Deep Learning systems (32 Tesla P100 GPUs with 114,688 CUDA cores, 2,752 GB memory, and 244 TB HDD); one Dell R920 and four Dell R730 storage servers;
Major Instrumentation – GC-MS package; Q500 Thermogravimetric Analyzer; NextSeq 550; real-time qPCR; Bioanalyzer; AFM; DSC; atomic absorption spectrometer; inverted phase contrast microscope; Z series Coulter counter
Fabrication Design Center School of Architecture. For building, developing and testing ideas. This state of laser cutters, CNC routers, wood and metal tools as well as 3d printers. In 2019, the Center has received AIA Houston Design Award.

PAST PERFORMANCE

NASA and NIH grants for radiation biology, NSF and DoD grants on big data analytics, cybersecurity, and smart rural city planning, USDA grants on agricultural and nutrition projects, including the International Goat Research Center. Current NASA Mentor Protégé Agreement with PAE at JSC.