National Aeronautics and Space Administration

Office of
Small Business Programs (OSBP)
where small business makes a **big** difference

Virginia State University

Introduction and Capabilities overview

Osubi I. Craig, Special Asst. to the President

Virginia State University

- Located in Petersburg, VA
  - Crossroads for I-95 and I-85 (North-South)
  - <30 min from I-64 (East-West)
  - Approx. 2 hrs from Washington, DC
- 1890-Land Grant Institution
- Population
  - Approx. 4,600
  - >90% of African descent
- Academics
  - 31 Undergraduate degree programs
  - 17 Master's programs
  - 2 Doctoral Programs

Virginia State University

- Science, Technology, Engineering, Mathematics Degrees
  - Computer Science (BS,MS)
  - Computer Engineering (BS)
  - Manufacturing Engineering (BS)
  - Electrical and Electronic Engineering Technology (BS)
  - Information and Logistics Technology (BS)
  - Manufacturing Engineering Technology (BS)
  - Mathematics (BS) (MS)
  - Biology (BS) (MS)
  - Chemistry (BS)
  - Psychology (BS, MS, PhD)

Virginia State University

- Major relevant capabilities
  - Sensor technology for autonomous control
  - Advanced manufacturing, including 3D manufacturing and friction stir welding
  - Growth spaces
  - Indoor agriculture
  - Process control and logistics
  - Robotics
  - Founding member of CCAM
    - Located within 15 min of facility

Virginia State University

CCAM delivers innovative solutions for manufacturing better products. An applied research center, CCAM provides production-ready advanced manufacturing solutions to member companies across the globe. Members guide the research, leveraging talent and resources within CCAM and at **Virginia State University (VSU)**, through a collaborative model that enables them to pool R&D efforts to increase efficiencies. Results can then be applied directly to the factory floor, turning ideas into profit faster and more affordably than ever before. CCAM is located just 15 minutes away from **VSU** in a state-of-the-art research facility in Prince George County, Virginia.

CCAM engages in research in three strategic focus areas. These areas are determined by the members and as such, are subject to change as technologies and member needs evolve.

Strategic Research Areas

- Adaptive Automation Systems
- Surface Engineering
- Additive Manufacturing

VIRGINIA STATE UNIVERSITY CAPABILITIES STATEMENT

DUNS No 074744624
Cage Code 0XRD4
NAICS ID 611310
SIC 8221
Federal EIN No 546001811

Certificates, Registrations, Accreditations

- Virginia State University is registered with SAM.GOV.
- Virginia State University is accredited by the Southern Association of Colleges and Schools (SACS)
- In the College of Engineering
  - the Manufacturing Engineering, Computer Engineering, Computer Science, Electrical Engineering Technology and Mechanical Engineering Technology programs are ABET Accredited.
  - The Information Logistics Technology program is ATMAE Accredited.
- The Reginald F. Lewis College of Business is through the Association to Advance Collegiate Schools of Business International (AASCB).
- All programs in the College of Education are accredited by The National Council for Accreditation of Teacher Education (NCATE).
- In the College of Humanities and Social Sciences, the Bachelor of Social Work (BSW) program is fully accredited through the Council on Social Work Education (CSWE).

Research Capabilities

Advanced manufacturing, including 3D manufacturing and friction stir welding
Surface engineering using nanotechnology
Data mining and machine learning
Unmanned aerial and terrestrial vehicles
Robotics
Cognition and learning, including neuroimaging
Bioinformatics and genomics
Fluorescence and scanning electron microscopy
Food safety
Embedded sensors and wireless sensor networks
Process control and logistics
Cybersecurity
Predictive modeling
Mobile and web application development
Game theory/dynamic systems
Nontraditional/drought resistant foods

Partnerships

Commonwealth Center for Advanced Manufacturing (CCAM; www.ccam-va.com)- a university/industry partnership which seeks to develop and provide advanced manufacturing solutions for its member companies. Industry members include Airbus, Alcoa, NASA, Newport News Shipbuilding, Rolls Royce, and Siemens. A full list of industry partners can be found at http://www.ccam-va.com/industry-members/.

Commonwealth Center for Advanced Logistics Systems (CCALS; www.ccals.com)- a partnership between universities, industries, and government which seeks to develop transformational improvements to logistics systems.

Point of Contact Information

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