

### FLORIDA ATLANTIC UNIVERSITY

# A UNIVERSITY OF DISTINCTION

## APPLIED ARTIFICIAL INTELLIGENCE & BIG DATA ANALYTICS

Florida Atlantic University continues to be led by its Strategic Plan for the *Race to Excellence*, 2015-2025, which outlines the ambitious effort to rocket the institution onto the national stage and build on its track record of relentless improvement.

Florida Atlantic University is well positioned to lead in the world's 4th industrial revolution – Applied Artificial Intelligence and Big Data Analytics. FAU will establish itself as a University of Distinction and prepare our students to be competitive in a rapidly changing global economy.



# AN ESTABLISHED TRACK RECORD OF RELENTLESS IMPROVEMENT

The Board of Governors Performance Based Funding (PBF) Model has provided FAU and the entire State University System with the framework and the resources to continuously improve. PBF has allowed Florida's higher education system to be ranked #1 in the nation (*U.S. News and World Report*) for the past three years!

### FAU 5-YEAR TRENDS











#### STUDENT SUCCESS FOR EVERYONE



U.S. News & World Report ranked FAU as a Top Public School in the nation for the first time in the university's history

- #140 (TIED) TOP PUBLIC SCHOOLS
- #45 (TIED) IN NATION FOR SOCIAL
  MOBILITY → NEW RANKING
- #45 (TIED) FOR CAMPUS ETHNIC DIVERSITY. HIGHEST IN SUS FOR THIRD YEAR IN A ROW!

4-Year Graduation Rates			
FULL-TIME FTIC	2016	2017	2018
All FAU Students	25.6%	27.5%	33.9%
Black Students	25.2%	25.7%	35%
Hispanic/Latino Students	23.7%	25.5%	31.1%

# FLORIDA ATLANTIC UNIVERSITY WILL BECOME A UNIVERSITY OF DISTINCTION IN APPLIED ARTIFICIAL INTELLIGENCE AND BIG DATA ANALYTICS BY

- enhancing and expanding degree offerings
- continuing to lift FAU's reputation in AI/Data research
- promoting AI/Data-driven engagement with industry

FAU's focus on AI/Data fully aligns with the university's Strategic Plan for the Race to Excellence and with the State University System 2025 strategic plan & accountability plans. Moreover, Florida's leading business and talent development organizations (Florida Council of 100/Florida Chamber) have discussed the growing workforce needs that exist in these emerging technological fields.

#### **ACADEMIC PROGRAMS**

- 8 AI/Data programs, including BS, MS, certificates, and tracks
  - MS in A.I. (first in FL)
  - MS in Data Science
  - BA/BS → MS in Computer Science & IT (analytics)
  - PhD w/ analytics track
- Proposed BS in Data in Jupiter

#### RESEARCH

- More than doubled FAU's total research exp. ⇒\$70M in FY19
- \$35M in active AI/Data grants throughout the entire university
- More than 80 research faculty currently working in AI/Data
- Florida's first NSF-funded Lab for A.I. and Deep Learning

#### **INDUSTRY**

- 1,400 tech firms in PBC -Business Development Board
- 80,000 employees in region -South Florida TechGateway
- 21,716 new jobs in FL by 2026 Florida Dept. of Econ. Opp.
- Up to 190K worker shortage in U.S. - McKinsey Global Institute

**FAU is poised to help** address both the workforce and research needs of our state and nation.

State And Local Projections	Employment		Change 2018-2026		Median
	2018	2026	Number	Percent	Salary
Florida Data Science	133,984	155,700	21,716	16.2%	\$86,821
Palm Beach Data Science	7,968	9,353	1,385	17.4%	\$93,311
Broward Data Science	14,590	17,245	2,655	18.2%	\$88,645

#### **2020 LEGISLATIVE PRIORITIES**

## **University of Distinction** – Applied Artificial Intelligence and Big Data Analytics – **\$18.1 MILLION**

Florida Atlantic University is well positioned to lead in the world's 4th industrial revolution – Applied Artificial Intelligence and Big Data Analytics. FAU will establish itself as a University of Distinction and prepare our students to be competitive in a rapidly changing global economy.

Florida Atlantic University seeks to leverage its robust and rapidly-growing focus of Applied Artificial Intelligence and Big Data Analytics (AI/Data) as an exemplar interdisciplinary pillar for FAU and the state of Florida. These innovative degree programs and training curriculum will educate students and train professionals to develop new skills for jobs that are not yet defined, and be part of the first generation of an AI/Data workforce.

Al/Data is a technologically advanced field that attracts high achieving students and premiere research faculty. FAU is seeking the resources to recruit, retain and equip those outstanding students and exceptional faculty members.

#### 2020 LBR's

#### AI/BIG DATA

2020: \$18.1M

\$12.8M Recurring \$5.3M Nonrecurring

#### PECO PRIORITIES

#### **Jupiter STEM/Life Sciences Building - \$11.15 MILLION**

- Total Project Cost \$35.03 million | 58,000 gsf research and teaching facility
- 2020 Request \$11.15 million remaining | Prior Funding: \$23.88 million

Funds will be utilized to construct a new 58,000 gsf Life Sciences (LS) STEM building on FAU's John D. MacArthur Campus in Jupiter. The facility will provide for increased enrollment of students in the STEM fields of biology, bioengineering, bioinformatics, chemistry, computational biology, engineering and neuroscience.

The STEM/LS building will allow for expansion of collaborative research in the STEM areas, especially in specific targeted areas such as neuroscience, biotechnology, bioengineering, bioinformatics/data science, chemistry. Increased research funding is estimated at a total of \$10 million: \$7 million of research funding and \$3 million of admin/training funding.

**Job Creation:** 20 principal investigators/regular faculty positions / 20+ research faculty and postdocs / 40+ graduate students / 60+ undergrads

#### A.D. Henderson University Lab School - \$15 MILLION

- Total Project Cost \$35.8 million | Project includes 77,000 gsf K-8 building, renovation of 27,000 gsf of existing space, new gymnasium and new auditorium
- 2020 Request \$15 million | Prior Funding: \$11.5 million | University Contribution: \$9.3 million

In 1967, the A.D. Henderson University School (ADHUS) was constructed. In 1968, the school admitted its first class. As a result of the success of the K-8 program, in 2004, Florida Atlantic University High School (FAUHS) was launched, the only fully-immersed dual enrollment school, offering both a bachelor's degree and a high school diploma simultaneously. ADHUS and FAUHS together serve 1,148 students (K-12) from Broward, Palm Beach, St. Lucie, and Martin counties. As a designated Title I school, 37% of the students qualify for free and/or reduced lunch.

ADHUS / FAUHS is the number one lab school in the state of Florida, based on state examinations, and ranks among the top 10 of all schools in the state, including both public and charter schools.

- Two Time National Blue Ribbon School of Excellence (2004 & 2018)
- Florida School of Excellence [FS 2012.28(8)] (2017 & 2018)
- Google Reference School & District (109 in the world only one in Florida)
- Niche Best Schools (Elementary: 2<sup>nd</sup> Nationally, Middle: 9<sup>th</sup> Nationally)

#### JUPITER RESEARCH BUILDING

Total: \$35.03M Previous: \$23.88M 2020: \$11.15M



Total: \$35.8M Previous: \$11.5M 2020: \$15M

