Implementation of the Arkansas Regional Workforce Grant

"Realigning with 21st Century Workforce"

Dr. Ken Warden, University of Arkansas – Fort Smith

Overview of Session

◆ Design of State Program
- Legislative Intent
- Requirements
- Pathway

◆ UAFS Program
- Need of the Region
- Statistics of Program
- Two Grant Awards
- Collaborations

◆ Next Steps
- Sustainability
- Data and Tracking
- Career Mapping

Design of State Program

Arkansas Department of Higher Education

Legislative Intent

◆ Workforce Initiative Act in 2015

◆ Creation of statewide comprehensive structure for workforce development that reduces skills gaps in the regional workforce pool

- Evaluation of workforce needs of state
- Coordination of secondary and postsecondary education, including career and technical programs (CTE)
- Pursuit of high demand jobs, including those that require industry recognized credentials, short-term training through bachelor level programs
- Create long-term relationships between employers and regional workforce alliances

◆ Facilitation of a skilled and employment-ready workforce through alignment of education and workforce needs through a competitive grant process

Core Requirements

◆Representation from mandatory partners
- CTE educators or appropriate local K-12 district that awards concurrent credit
- Technical institute, community college or university offering CTE programs
- Employers representing critical needs in the identified workforce region

◆Enhance, expand or create clearly defined CTE pathway program(s) at technical institutes, community colleges or universities that includes concurrent secondary center programs to fill a critical, demonstrable local workforce need

Core Requirements

◆Include programs which emphasize basic skills instruction concurrently with occupational training

◆Embrace diversity of student enrollment

◆Provide essential support services which link to resources that assist students in progressing along the identified pathways, including advising on academic, employment, financial and personal issues

◆Develop and implement collaborative apprenticeship or training programs that prepare workers for rapid entry into the workforce or provide recognized industry certifications

Pathway of Program in Arkansas

◆ Workforce regions in Arkansas

◆ Grants designed to meet the workforce needs of the region

◆ Awarded Grants
- 21 Planning Grants
  - Range from $31,512 to $95,000 for one year grant
- 20 Implementation I grants
  - Range from $356,740 to $988,570 for two year grant
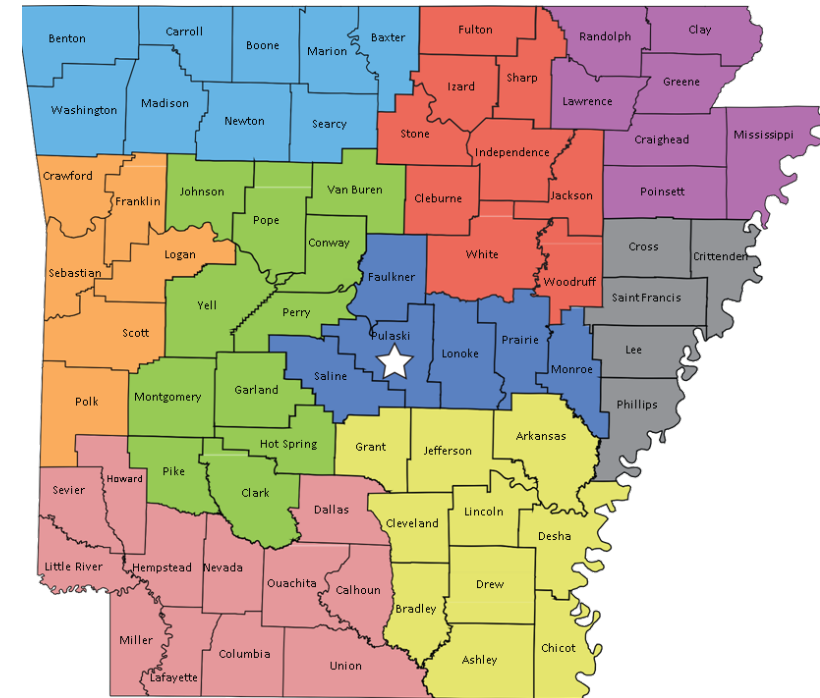
UAFS Program

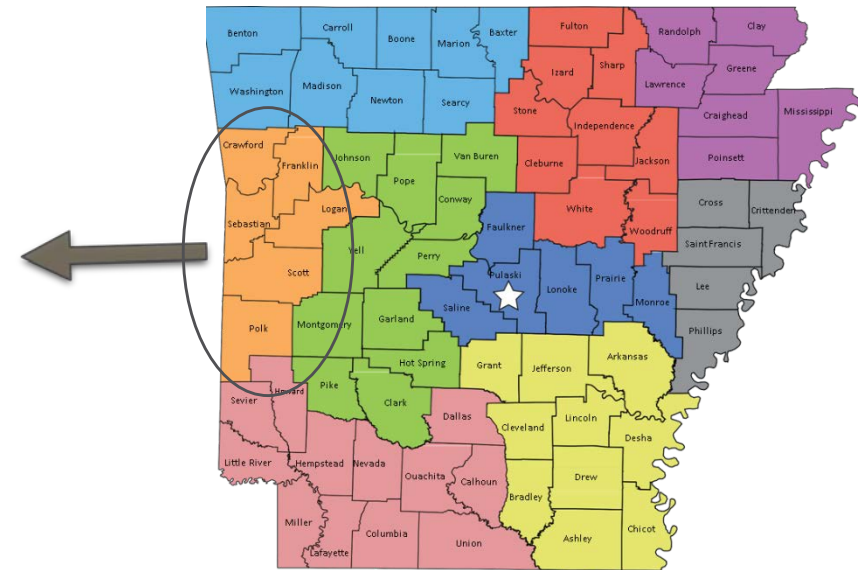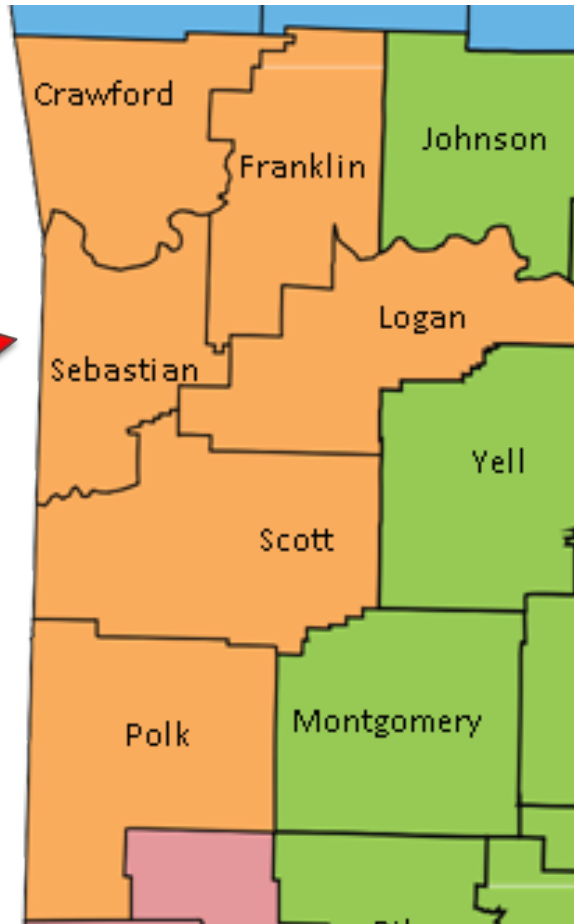# Workforce Region Impacting Fort Smith Area

◆ Grant impacted counties:
- Crawford
- Franklin
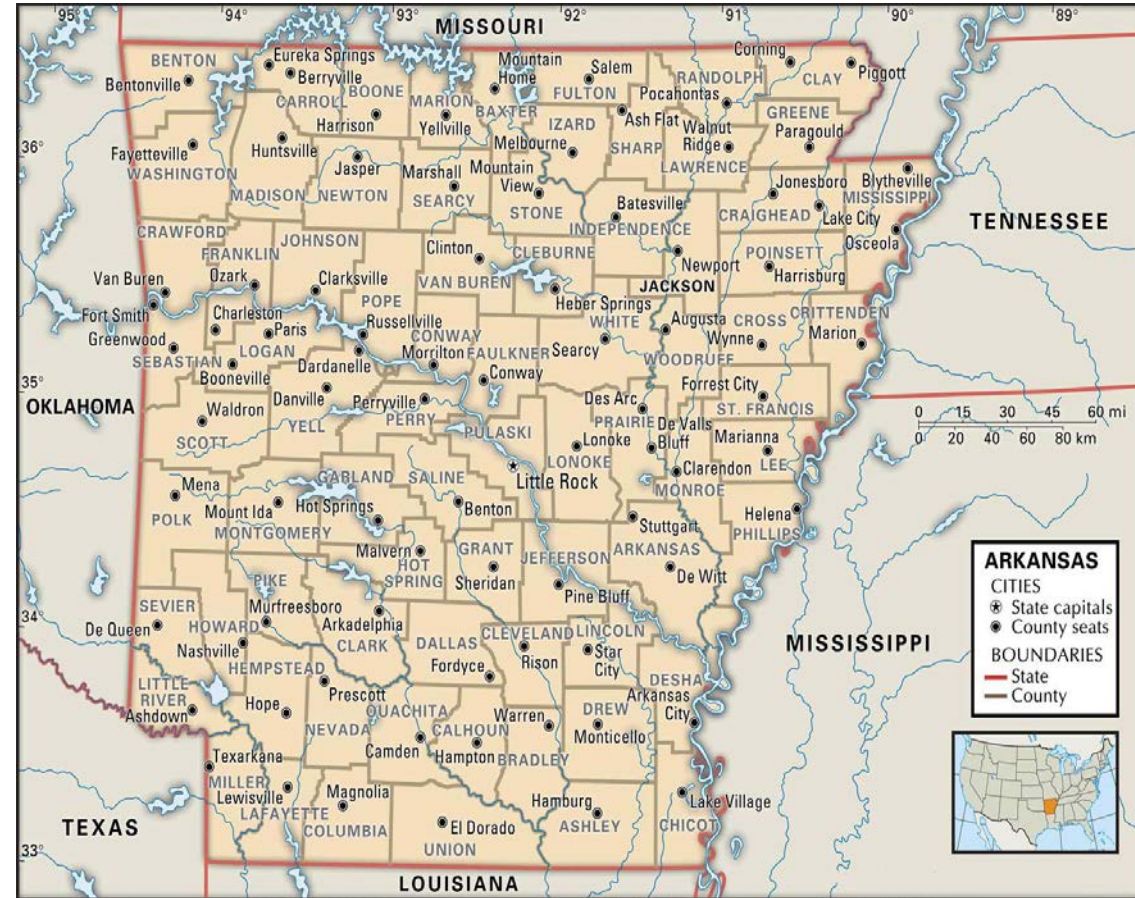- Logan
- Sebastian

Arkansas median household income: $42,336

U.S. median household income: $55,322

United States Census Bureau: American Fact Finder. (2017). *Income in the past 12 months (in 2016 inflation-adjusted dollars) 2012-216 American Community Survey 5-year estimates.* [Data file]. Retrieved from https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF

2010 Population of Area

- **State of Arkansas = 2,915,918**

- Sebastian County (Fort Smith) = 125,744

- Crawford County = 61,948

- Franklin County = 18,125

- Logan County = 22,353

American Fact Finder. (2010). Profile of General Population and Housing Characteristics: 2010 Demographic Profile Data. Retrieved from https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF

Maps of Arkansas. (2018). Retrieved from https://www.mapofus.org/wp-content/uploads/2013/09/AR-county.jpg

Need of the Regional Workforce

- 1.5 million jobs related to robotics and require "middle skills"

- More than 25,000 jobs in three county area in western Arkansas are in the manufacturing sector

- Transferable skillsets

Job Title	Job Openings	Mean Wage (AR)
Cyber Systems		
Information	112,000	$67,230
Automation		
Manufacturing	364,000	$33,120

Partnership in Region

◆Unique, three tier partnership
  - Higher education
    - University of Arkansas – Fort Smith
  - Secondary education
    - Eight area high schools
  - Business and industry
    - Ten regional companies with approximately 24-35 different professionals

◆Classes on high school campus

◆UAFS instructors travel to high schools

◆Replicated UAFS labs at high schools with same or more updated equipment

Logos

Two Grant Pathways

Robot Automation

◆ Leads to Electronics Technology skillset
- Certificate of Proficiency
- Technical Certificate
- Associate of Applied Science
- Bachelor of Science in Electrical Engineering Technology
  - Certificate of Proficiency in Robotics imbedded throughout AAS and BEET

◆ 21st Century Technology

◆ Replicated UAFS lab at high school campuses

Cyber Systems

◆ Information Technology/Computer Science
- Bachelor of Science in Information Technology

◆ Learn multiple computer languages

◆ Virtual simulation software
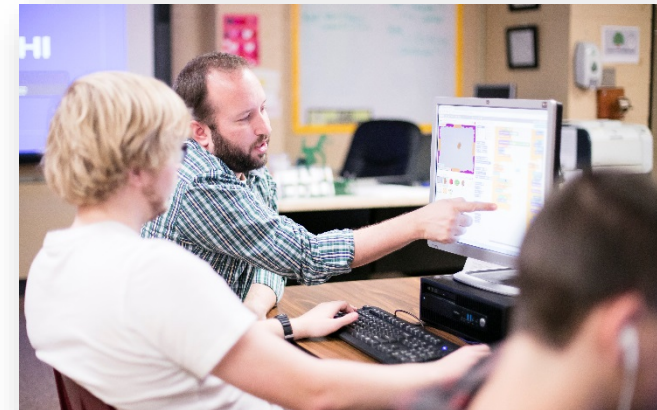
Program Coursework

Robot Automation

- Year 1
  - Fundamentals of Electricity
  - Introduction to Electronics Technology
  - Special Topics: Robot Automation

- Year 2
  - Industrial Electricity
  - Electrical Circuits and Components

- Year 3
  - PLC Applications
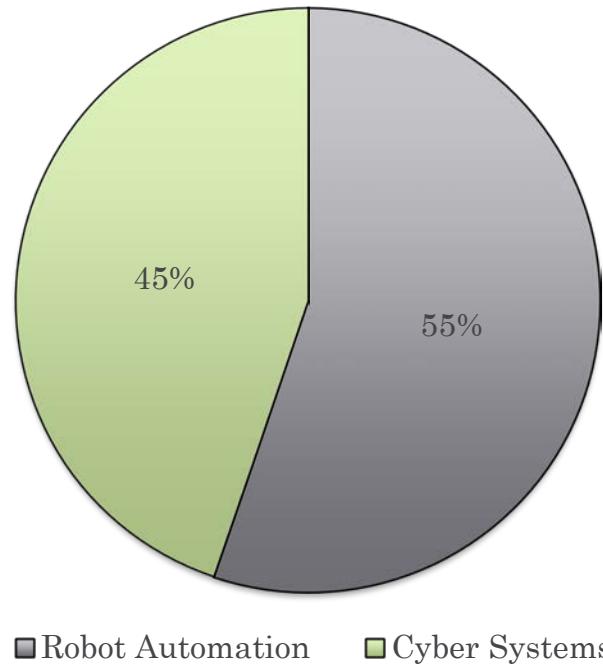 - Intro to Programming

Cyber Systems

- Year 1
  - Computer and Information Science Concepts
  - Foundations of Programming I

- Year 2
  - Foundations of Programming II
  - Foundations of Networking

- Year 3
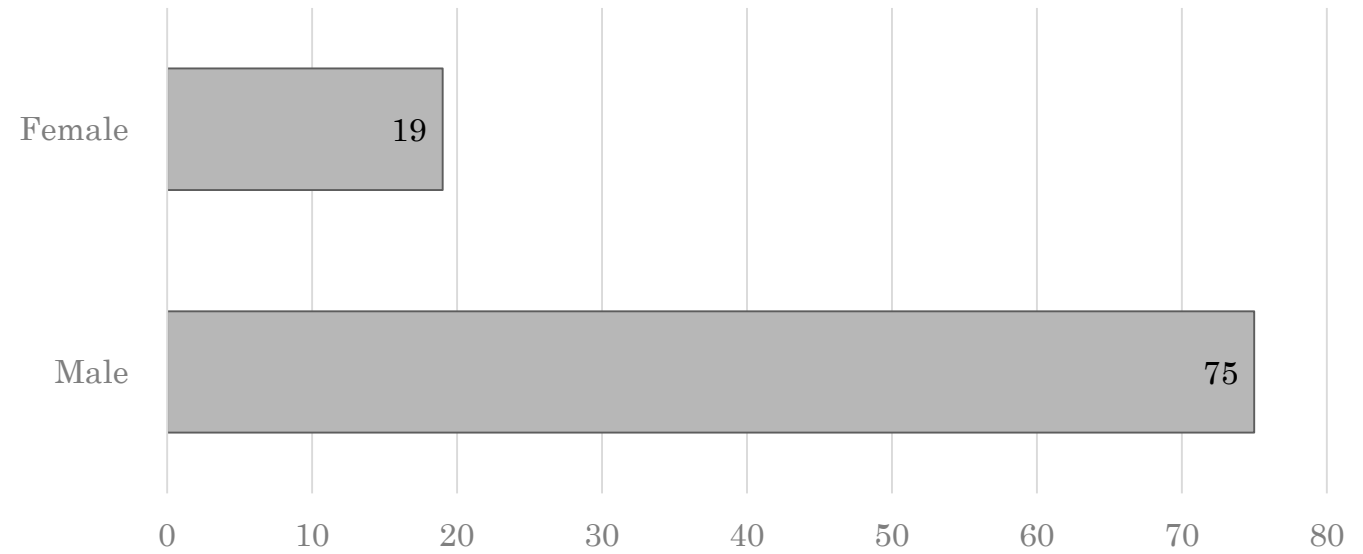 - Foundations of Operating Systems
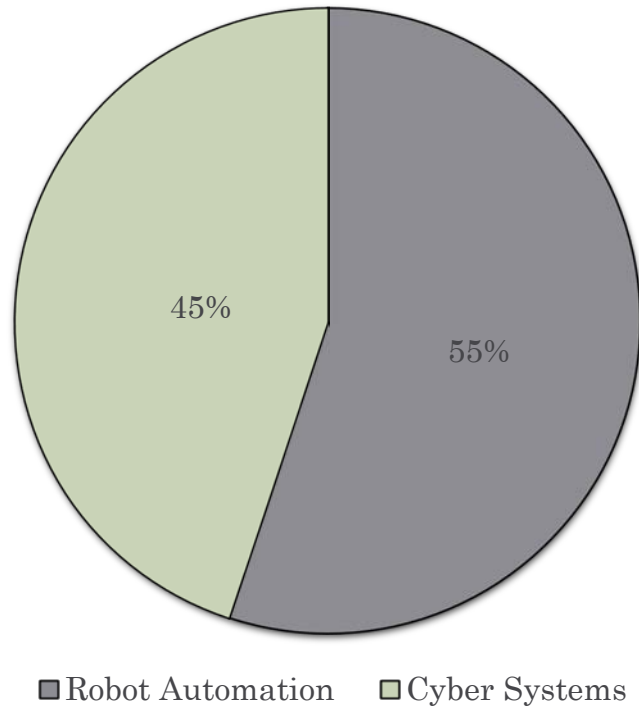 - Database Systems I

Fall 2016

RWG Student Participation

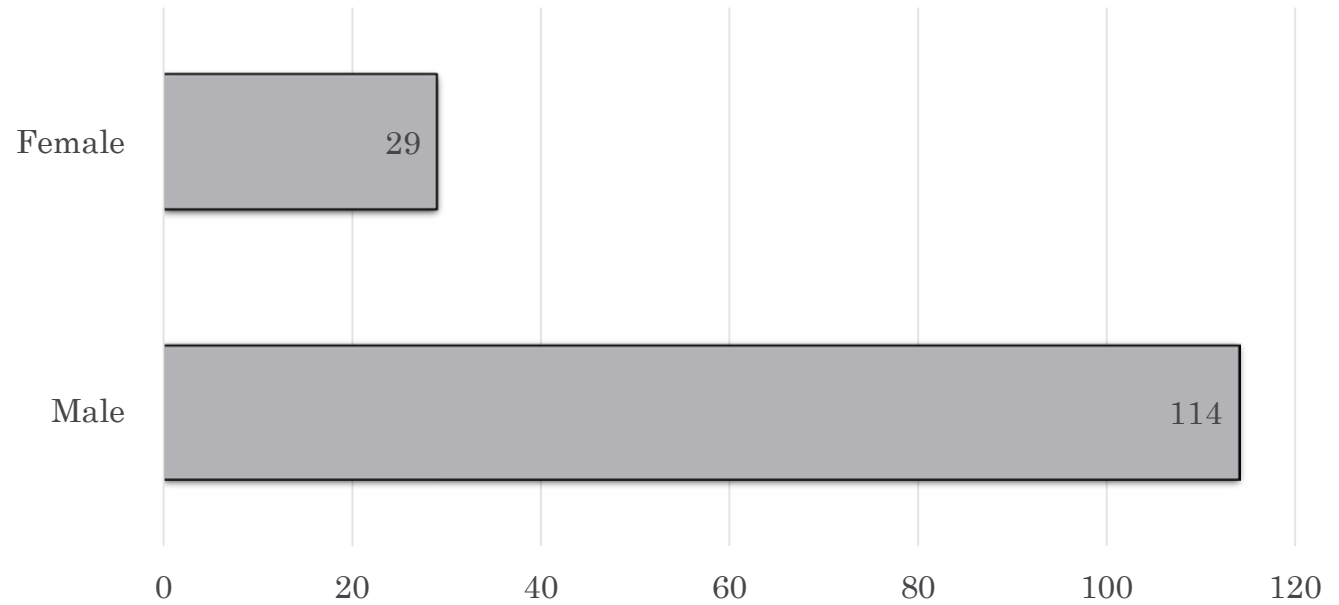# Fall 2017

RWG Grant Student Participation

- Robot Automation: 55%
- Cyber Systems: 45%

RWG Students

- Female: 29
- Male: 114

Student Success – Year 1 & 2

	Start of Term	% of students with 'A'	% of students with 'C' or higher
Cyber Systems	31	67%	93%
Robot Automation (all)	69	55%	95%

	Start of Term	% of students with 'A'	% of students with 'C' or higher
Cyber Systems	52	52%	80%
Robot Automation (all)	94	66%	99%

Additions/Changes to Programs

Cyber Systems

◆Change of school partnership

◆Addition of school partnership

◆Evaluation of program and student success each semester and year

Executive and Professional Mentorships

◆ 10 companies

◆ 24-35 mentors

◆ Various ranges in careers
  - Operations managers
  - Engineers
  - Intelligence analysts
  - CFO
  - HR manager
  - Plant manager
  - Senior director technology
  - IT specialist
  - Senior project engineer

◆ ABB (Baldor Electric)

◆ ArcBest

◆ Arkansas Air National Guard, 188th Wing

◆ Arkansas Army National Guard

◆ Arvest

◆ Hickory Springs Manufacturing

◆ Pernod-Ricard

◆ Trane Custom Commercial

◆ Walmart Technologies

◆ Weldon, William, and Lick, Inc.

Logos

Walmart

Ingersoll Rand

W&L SINCE 1898

ARVEST

HICKORY SPRINGS MANUFACTURING COMPANY

ArcBest Corporation

ABB

Pernod Ricard

188TH WING

Extensive Collaborations

◆UAFS Interdisciplinary
- College of Applied Science and Technology
- College of Science, Technology, Engineering, and Mathematics

◆K-12 Partnership
- Eight school districts
- Collaborative advising

◆Industry Partners
- Career Mapping
- Salary and positions available in region

◆Advisory Board
- K-12
- Industry
- Postsecondary

◆State Agencies
- Arkansas Department of Higher Education
- Arkansas Department of Career and Technical Education

Next Steps

Next Phase of Program

◆ Off-Site Locations
- Pilot group with Fort Smith Public Schools
- Classes at industry partner locations
- Classroom connection to real-world skills
- Networking and partnership for students
- Integrated projects to allow students to make classroom connections to workplace needs

◆ Sustainability Model
- Scaled tuition and fee structure
- Grant pays all upfront costs in year 1
- School districts pick up a portion of costs beginning in year 2

◆ Job Placement and Internships
- Goal: Track student job placement and graduation track
- Intensive and collaborative academic advising with program staff and high school counselors

Partnership with State

◆Partnership and collaboration with others around the state

- State agencies
  - Arkansas Department of Career Education
  - **Automated Robotics Technology (ART)**
- Secondary education
- Institutions of higher education
- Business and Industry

Questions?