

Kayla Midlam

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Education

BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING

EXPECTED MAY 2021

- Minor(s): Statistics, Computer Science
- University of Arkansas – Fayetteville
- Member of the University of Arkansas Honors College
- Cumulative GPA: 3.53

HIGH SCHOOL DIPLOMA – GRADUATED WITH HIGHEST HONORS

MAY 2017

- Russellville High School
- GPA: 4.01

Engineering Experience

UNIVERSITY OF ARKANSAS IEEE ROBOTICS TEAM MEMBER

AUGUST 2017 – PRESENT

- Contributing member on the 5-person U of A IEEE robotics team to develop a robot for the 2018 Spring Region 5 IEEE robotics competition
- Specialized in aiding in the 3D printing processes

INTERNSHIP – RUCKER NUCLEAR CONSULTANTS INC.

OCTOBER 2015 – AUGUST 2017

- Assisted with the preparation of Electrical Power Research Institute (EPRI) industry standard documents
- Performed tasks for multiple nuclear plants around the nation for cable inspections including inspection plan database development from plant drawings, calculations, and other documents
- Tasked with learning about general Electrical Engineering concepts involved in the nuclear consulting industry for use with multiple projects
- Worked extensively with all Microsoft Office programs (Word, Excel, Access, PowerPoint, and Visio)
- Performed Information Technology services at the office (Security Cameras, Office Server, Office Network, NAS)
- Modeled different objects using Autodesk Inventor for use in EPRI industry documents

Engineering Projects and Coursework

COMPUTER BUILDING EXPERIENCE

JULY 2014 – PRESENT

- Researched and completed a desktop PC build for personal use
- Troubleshooted personal desktop computer problems including both software and hardware
- Created a dual-boot operating system with Ubuntu Linux and Windows 7 for a personal computer
- Built and assisted others with personal computers builds

3D PRINTING EXPERIENCE

JANUARY 2016 – PRESENT

- Expanded the 3D printing knowledge of the Russellville High School EAST program
- Maintained and operated a personal 3D printer
- Operated personal 3D printer in conjunction with designing and modeling different items for school and personal use

PROJECT LEAD THE WAY (PLTW) COLLABORATION

JANUARY 2016 – MAY 2016

- Developed a bracelet that monitored specific vitals using Arduino, other sensors, and in-class experience for development as part of an outside challenge to design a medical device
- Collaborated with other PLTW biomedical students for prototypes and final design
- Received 3rd place at state competition and an invitation to continue to a national competition

ENGINEERING DESIGN AND DEVELOPMENT – DESIGN AND IMPLEMENTATION OF A NEW ENGINEERING CLASSROOM

AUGUST 2015 – MAY 2016

- Designed, researched, and implemented a new classroom layout for the engineering students of Russellville High School

DIGITAL ELECTRONICS – BASICS

AUGUST 2015 – MAY 2016

- Studied binary, truth tables, and Boolean expressions
- Learned AND, OR, and Inverter combinational logic systems
- Built upon the previous ideas with K-Mapping and Universal gates
- Used Combinational Logic Designs and Programmable Logic Devices to reiterate previous NAND circuits
- Experienced with Arduino and Project Lead the Way (PLTW) proprietary microcontrollers

DIGITAL ELECTRONICS - BIRTHDAY PROBLEM

NOVEMBER 2015

- Designed and implemented a circuit that was designed to display 07-07-1999 when switches were changed in ascending binary counting
- Successfully completed the entire circuit in the fastest amount of time in the class

Leadership Experience

RUSSELLVILLE HIGH SCHOOL ROBOTICS TEAM

AUGUST 2013 – MAY 2017

- Captain of the team (August 2015 – May 2016)
- Co-captain of the team (August 2016 – May 2017)
- Learned and implemented different problem-solving concepts involved in making a functional robot with 5-10 people
- Oversaw 2 – 3 other smaller robotics teams a part of the larger club, each team required to present a functional robot at each competition under my supervision

TECHNOLOGY STUDENT ASSOCIATION (TSA)

AUGUST 2013 – MAY 2017

- 1st Arkansas State President of TSA (August 2016 – May 2017)
- Local Russellville Chapter (August 2015 – May 2016)
- Revised state Technology Student Bylaws, attended all TSA events, and oversaw all functions of the organization

TUTORING – MIDDLE SCHOOL MATHEMATICS

MARCH 2017 – MAY 2017

- Tutored middle school student for better understanding of mathematics material

Volunteer Work

FIRST LEGO LEAGUE ROBOTICS JUDGE

- Assisted a fellow judge with scoring children grades 4-8 on research and innovation projects in which they prepared.

Awards and Honors

HONORS COLLEGE SCHOLARSHIP

- Awarded \$4,000 per year for education costs at the University of Arkansas; renewable up to 4 years

GOVERNOR'S DISTINGUISHED SCHOLARSHIP

- Awarded \$10,000 per year for education costs at the University of Arkansas
- Limited to 400 exemplary Arkansas high school students with high GPAs and a 32+ composite ACT Score

Skills

- Trained in Multisim Circuit Design Software
- Proficient with Autodesk Inventor Modeling Software
- Experienced with RobotC and Arduino programming languages
- Certified Microsoft Office Specialist in Word, Excel, Access, and PowerPoint