# Ryan Westfall

🛮 (918) 729-9609 | 🗷 Ryan-Westfall@ou.edu | 🌴 Ryan-Westfall.com | 🖸 github.com/Ryan-Westfall | 🛅 linkedin.com/in/Ryan-Westfall

## **Education**

University of Oklahoma

Norman, OK

B.S. WITH HONORS IN COMPUTER SCIENCE, MINOR IN MATHEMATICS

August 2018 - May 2022

GPA: 3.83

Coursework: Data Structures, Principle of Programming Languages, Theory of Computation, Operating Systems, Computer Organization, Applied Statistics, Linear Algebra, Discrete Mathematics

**University of Oxford** 

Oxford, United Kingdom

HONORS AT OXFORD STUDY ABROAD PROGRAM

June 2019 - July 2019

**Claremore High School** 

Claremore, OK

HIGH SCHOOL DIPLOMA

August 2014 - May 2018

• GPA: 3.95 | ACT: 34

 Honors: Valedictorian, TSA State Champion in Coding (2017) and On-Demand Video Production (2018), 3rd place VEX Robotics (2018), All-State Tennis (2018), President of Zebra TV Newscast (2018)

## **Experience**

**University of Oklahoma** 

Norman, OK

RESEARCH ASSISTANT January 2020 - Present

 Generated benchmark source files using source-to-source polyhedral model compilers PPCG and PLUTO utilizing the polyhedral benchmark suite PolyBench/C

Compiled previously collected benchmark source files on the Intel icc compiler and collected their run-time data using UT Austin's supercomputer Stampede2

Pixorize New York, NY

SOFTWARE INTERN May 2019 - July 2019

Created an in-house text-editor application that streamlined Pixorize's content creation and management process: built a React app and Express REST API, containerized front-end and back-end using Docker, utilized E2E and unit tests

Built GUI that automated image thumbnail creation by using React + Cropper.js and Node.js + GraphicsMagick

## **Projects**

#### **Html-to-Pdf Creator Tool**

Architected and built Node.js application to quickly generate PDFs from html and css, using express to create a local server from which users
can preview and edit PDF pages

· App features production and development modes, a Docker containerized workflow, hot reloading in the preview server, and html data injection

#### **Stock Market Analyzer**

• Designed and implemented algorithm to analyze market trends to buy and sell stock with simulation money

#### Phi Kappa Psi Fraternity Website

• Designed and developed Gatsby website to recruit for and tell information about our local chapter

#### **Ryan Westfall Website**

· Created Gatsby portfolio website utilizing github's API to pull public repository data from my profile

### **Extracurricular Activities**

Robotics Club Norman, OK

TEAM PROGRAMMING LEAD August 2018 - Present

• Sketched robot mock-up, created 3D print components in CAD, laser cut plywood to create chassis, soldered wires to pins/connections on motor controller and microcontroller, and coded autonomous event loop in Arduino

Phi Kappa Psi Fraternity

Norman, OK

Scholarship Chair April 2019 - Present

Designed and implemented academic support plan to improve chapter's GPA average: tracked fraternity members grades, offered academic
assistance, scheduled and proctored study hours

## Skills & Interests

**Skills:** Javascript, React, Express, Docker, Bash, HTML, CSS, Java, C, C++, Python, Gatsby, Git, LLVM, Adobe Suite

**Interests:** League of Legends, Tennis, Ping Pong, Video Production, Chess, Reading