# Carter Buckner

c: 870-671-8652 | e: cb051@uark.edu | www.linkedin.com/in/CarterBuckner/ | https://github.com/cb051

### **Education**

University of Arkansas, Fayetteville (UARK) | Dec 2021 | B.S. Computer Science | Minor: Music | Cum GPA: 3.479

### **Relevant Courses**

Database Management\*

Digital Design

• Computer Organization

• Software Engineering\*

Operating Systems

• Computer Networks

Algorithms

 Formal Languages and Computability

Cryptography

Artificial Intelligence

## **Projects**

**Mobile App,** Teachers Support Teachers (Texarkana, AR)

Designed and developed a cross-platform app for a local for-profit organization supporting teachers (~300 teachers in and around Arkansas)

- Enables users to interact with and donate to the organization
- Planned deployment in Fall 2022

Mobile App, CheroKey

**Dec 2020-May 2021** 

Jan 2020-present

- Designed and developed a cross-platform game (Flutter/Dart) with a local Cherokee teacher
- Enables Beginner and Intermediate level students to study Cherokee vocabulary fundamental

## Work & Research Experience

### Research Assistant, Technology Privacy University of Arkansas

Jan-present

- Worked with Dr. Qinghua Li on a government funded project to secure the energy grid
- Project explored security vulnerabilities for solar farms
- Tested different security vulnerabilities for a web application used on the project
- Gave security minded policy recommendations for private entities in energy sector
- Track current policy recommendations around algorithmic and AI fairness

### Technology Software Intern, Northrop Grumman Corporation

Summer 2019-2021

- Developed a regression test framework for updates to B-2 aircraft software
- Worked with a team to develop a database tool for internal career development
- Created and taught software courses for internal career development
- Developed components of a web-based form
- Tested components manual with SQL database entries

## Marketing Intern, Washington County Democrats

Feb 2019-2020

• Developed e-communications, graphics for social media platforms and party website

# Research Assistant, AESIR University of Arkansas

Jan-Dec 2019

- Worked with Dr. Alex Nelson on setting up lab supplies for an encryption project
- Project explored using encryption to mask personal identifiable data from third parties
- Eventual applications would include encrypting sensor health data in wearables before sharing to third parties

## Facilitator, University Community Talks (Pulse)

October 2018

- Worked to create and facilitate conversations on how to address campus sexual assault
- Co-organized and hosted a panel with local community members and university officials on the topic
- Critically viewed and discussed current university policies on the topic

### Research Intern, IOT-SITY, University of California, Irvine

Summer 2018

- Conducted developmental research in creating a human eye prosthetic with tracking capabilities
- Annotated existing documentation for the hardware and software used
- Developed image processing and Bluetooth communication functions between

<sup>•</sup> Mobile Programming

<sup>\*</sup> courses taken at University of Nicosia (Nicosia, Cyprus)

an Arduino and Raspberry PI (IoT research project)

• Presented research at UC Irvine, University of Arkansas, and the University of Southern California

## **Program Manager,** Verizon Innovative Learning

May-June 2018

- Developed and taught program curriculum to teaching staff
- Assisted behavioral research done by the team to understand how a STEM and arts curriculum can better benefit young students
- Served as intermediary for companies and university relations for technology and product usage
- Served over 100 middle school youth and parents through faculty leadership and curriculum training, e-communications/graphics, logistics, and youth projects

### Facilitator, Human Rights Campaign (HRC Field Office, Little Rock, AR)

January 2018

- Led group discussions on how youth can organize and take action within their communities
- Discussed effective fundraising strategies to local Arkansas youth and adults

## **International Experience**

### Winery Database, Database Management Systems (University of Nicosia – Nicosia, Cyprus)

Feb-Jun 2020

- Created a MySQL database for fictional Cypriot winery
- Defined meaningful end-user queries

### **Tech/UI Design Lead,** Software Engineering (University of Nicosia – Nicosia, Cyprus)

Feb-June 2020

- Worked with a local Montessori school to create administrative desktop app
- Led UI layout design and implementation process with customer and four-person team

### Semester Abroad, University of Nicosia, Nicosia, Cyprus

Spring 2020

- As a student, worked with a local software team
- Participated in the local music scene
- Went to community talks on Cypriot policy with regard to refugees
- Took classes at one of the local univeristies

## Extracurriculars, Volunteerism, and Leadership

#### Out in STEM (oSTEM)

Aug 2019-present

- Member of an affinity group for queer/LGBTQ+ students in STEM
- Attended meetings geared towards increasing LGBTQ+ representation in STEM

#### Hour of Code Dec 2019-present

• Volunteered in elementary schools teaching coding fundamentals

#### Louis Stokes Alliance for Minority Participation (LSAMP)

Aug 2017-present

- Member of a national network for minorities in STEM
- Attended meetings geared towards increasing minority research and graduate opportunities

### **National Action Council for Minorities in Engineering (NACME)**

Aug 2017-present

• Member of national network for minorities in Engineering

#### **National Society of Black Engineers (NSBE)**

Aug 2017-present

• Board member and general member of group supporting black engineers

## **University Symphony Orchestra**

Aug 2017-present

- Principal bass for university symphony
- Performed throughout the campus and larger community

### Eagle Scout Rank, Boy Scouts of America

April 2017

- Built a gazebo for a local school turned park
- Organized donations and volunteerism from people throughout the community
- Held numerous leadership positions