## Jonathan Bryan

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Portfolio: https://jtbryan.github.io | GitHub: https://github.com/jtbryan | LinkedIn: https://www.linkedin.com/in/jonathan-bryan-004953109/

## **EDUCATION**

University of Tennessee, Knoxville Expected Graduation: May 2021

BS, Major: Computer Science, Minor: Cybersecurity

Knoxville, TN

GPA: 3.92/4.0 EXPERIENCE

University of Tennessee, Knoxville

December 2019 - Present

Undergraduate Research Assistant at Usable Security and Engineering Research Laboratory

Knoxville, TN

Professor: Dr. Austin Henley

Developed a package for Python used to analyze the shape of code by mining GitHub repositories

Applied data analysis techniques with Python to visualize data stored in MongoDB

University of Tennessee, Knoxville

August 2019 – May 2020

Knoxville, TN

Professor: Dr. Xiaopeng Zhao

• Created a gamified platform for users to interact with a drone using an EEG headset

Developed the user interface for the platform using Node-RED and Python

Undergraduate Research Assistant at Nonlinear Bio-Dynamics laboratory

**PROJECTS** 

File Locker Fall 2019

COSC 483 – Introduction to Applied Cryptography

Tools and Languages: Python

Developed a script used for simulating a simplified encrypted file system

• Implemented cryptographic algorithms (RSA/ECC) for encrypting and digitally signing files using Python

CourseCal Fall 2019

COSC 340 – Software Engineering

Tools and Languages: HTML • CSS • JavaScript • Electron.js • git

Created an Electron application used to allow students to effectively manage events in their life

• Established a collaborative environment with teammates by encouraging the use of version control based development

VocaCoord Summer 2019

COSC 493 – Independent Study

Tools and Languages: HTML • CSS • JavaScript • Node.js • React.js • Firebase • git

Contributed to the design of <u>VocaCoord</u> with the goal of improving the learning experience of students who are hearing impaired

• Enhanced the design of the application using React, allowing teachers to gain further insight into student participation

## **SKILLS**

Programming Languages: C++ • C • Python • Java • Ruby • PHP • JavaScript • CSS • HTML

Databases: SQLite3 • MySQL • MongoDB • Relational Database Design

Frameworks & Libraries: Ruby on Rails • Node.js • React.js • Electron.js

Tools: Git • SVN • GitFlow • Docker

Operating Systems: Linux (Ubuntu 16 & 18, Kali, Arch) • Windows 7/10 • Mac OS

Cloud Services: Google Cloud Platform (GCP)

## **CLUBS & HONORS**

- Co-captain & Programmer for Pellissippi IEEE Robotics club (2017-2018)
- Member of HackUTK club
- Presented Undergraduate Research at both UT Day on the Hill as well as EURēCA