

# 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/>

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## EDUCATION

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### University of Tennessee, Knoxville

BS, Major: Computer Science, Minor: Cybersecurity

GPA: 3.92/4.0

Expected Graduation: May 2021

Knoxville, TN

## EXPERIENCE

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### Oak Ridge National Laboratory

SULI Intern

January 2021 – Present

Oak Ridge, TN

- Worked collaboratively with Dr. Mariano Pablo in the Computer Science and Mathematics division to develop graph-based learning algorithms.
- Applied machine learning algorithms to predict vulnerabilities in open-source GitHub repositories.

### University of Tennessee, Knoxville

Undergraduate Research Assistant at *Usable Security and Engineering Research Laboratory*

December 2019 – Present

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

Undergraduate Research Assistant at *Nonlinear Bio-Dynamics laboratory*

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

## PROJECTS

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### CourseCal

COSC 340 – Software Engineering

Fall 2019

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

COSC 493 – Independent Study

Summer 2019

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

- Contributed to the design of [VocaCoord](#) 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

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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

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- 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 *EURzCA*