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

Oak Ridge National Laboratory

January 2021 - Present

SULI Intern

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

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

Undergraduate Research Assistant at Nonlinear Bio-Dynamics laboratory

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

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