

# TANNER FRY

## INFO

### Phone

731-445-4686

### Email

tannerfry12@outlook.com

### GitHub

<https://tannerfry.github.io/>

### LinkedIn

<linkedin.com/in/tannerfry12>

## SKILLS

### Programming:

- Python
- C/C++
- JavaScript
- HTML/CSS
- PHP
- VHDL
- MIPS Assembly
- SIMD
- VBA

### Databases:

- MySQL
- sqlite3
- MongoDB

### Technical Skills:

- Software Engineering
- Machine Learning
- Deep Learning
- Big Data Management
- Version Control (e.g., Git)
- Algorithm Development
- Algorithm Optimization
- Database Design
- Object-Oriented Design
- Debugging

### Soft Skills:

- Creativity
- Adaptability
- Communication
- Teamwork
- Problem Solving
- Leadership
- Attention to Detail

## PROFILE

A highly motivated computer engineer seeking to fill a position where I can utilize my experience in software engineering and data science to build innovative and cutting edge applications.

## EDUCATION

### University of Tennessee

Knoxville, TN

Aug 2016 – May 2021

M.S. in Computer Engineering

B.S. in Computer Engineering

## EMPLOYEMENT HISTORY

### Chemical and Biomolecular Software Engineer,

Knoxville, TN

### University of Tennessee

May 2019 – Current

- Lead software engineer for the CASPER project - a software used for enhanced guide-RNA design and targeting analysis.
- Developed in Python, C++, sqlite3, and PyQt5.
- Developed / Optimized CASPER and existing bioinformatic tools.
- Increased CASPER's overall speed by 217% and reduced memory usage by 85%.
- Increased Sequence Finder speed by 175% and reduced memory usage by 73%.
- Packaged and deployed CASPER on multiple operating systems including Windows 10, MacOS, and Ubuntu 18.04.
- Assisted in UI development.

### Graduate Teaching Assistant,

Knoxville, TN

### University of Tennessee

Jan 2021 – May 2021

- Graduate teaching assistant for CS130 Computer Organization.
- Taught and demonstrated projects developed in C, C++, MIPS assembly, and Logisim (circuit design).
- Graded and debugged student submitted code / circuit designs.

### Computer Science Research Assistance,

Knoxville, TN

### University of Tennessee

Dec 2019 – Jun 2020

- Research assistant focused on data science related to Git.
- Analyzed performances of existing machine learning models.
- Updated existing machine learning model to analyze new Git related data.
- Co-author of a published research paper focused on *Identity Resolution of 38 million Author IDs extracted from 2B Git Commits*:  
[doi.org/10.1145/3379597.3387500](https://doi.org/10.1145/3379597.3387500)

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**OIT Student Computer Support,  
University of Tennessee**

**Knoxville, TN**

Aug 2018 – Dec 2020

- Performed software and hardware troubleshooting.
- Executed successful malware removals for various systems.
- Performed both single and dual operating system installations.

**Cyber Security Analyst Intern,  
Le Bonheur Healthcare**

**Memphis, TN**

June 2018 – Aug 2018

- Monitored the network for malicious activities.
- Automated the risk management reporting system by setting up a data pipeline for transforming risk analysis results into high-level summary reports.

**IT Technician,  
Tencom Technologies and Web Services**

**Dyersburg, TN**

May 2017 – Aug 2017

- Responsible for hardware and software troubleshooting.
- Developed a new temperature sensor product for a server room.
  - Developed using Python and a Raspberry Pi with external sensors for temperature and humidity monitoring.
  - Designed to automatically notify the client of any spikes in temperature or humidity that could impact performance of the servers.
- Developed a surveillance monitoring system for the business using Raspberry Pi's.