

EDUCATION

Lexington, KY **University of Kentucky** **Aug. 2019 – Dec 2022**

- **Major:** Computer Science, B.S. (GPA: 4.0) *Minor: Math*
- **Coursework:** Object Oriented Programming in C++ and Java, Intro to Software Engineering, Intro to Computation (MATLAB)

SKILLS

- **Technical:** Graphics Pipeline, OpenGL, Unity, Unreal Engine, C / C++, Matrix/Linear Algebra, Shaders, C#, Eagle PCB, MATLAB, JavaScript, Python, PHP, Linux, MacOS, Go / Golang, HTML / CSS, Git, Java, Data Visualization, Databases, Web Design, AngularJS, IonicJS

EMPLOYMENT

Software Engineer **University of Kentucky** **May 2019 – Present**

Department of Communication (comm.uky.edu)

- Improved faculty data comprehension by creating a data visualization web app in PHP, JavaScript and SQL
- Automated job search process by using Python to parse new applicants, saving 2 hours daily
- Integrated Docker into applications department wide while co leading a project to revitalize department dev ops
- Integrated new code review and management system using version control and GitLab
- Leveraged Knowledge of MVC Architecture, Web Debugging, Docker, Dev Ops, GitLab

Bioinformatics Research Assistant **University of Kentucky** **Aug 2018 – Dec. 2018**

- Reduced dependency on legacy-based platforms by integrating Linux Fedora 28 into the lab infrastructure
- Spearheaded the development of a python implementation of the open source software “BioFabric”
- Used Python to analyze sample genome datasets and visualize them using BioFabric
- Leveraged Knowledge of System Design, Data Science, Debugging, and Visualization.

EXTRA-CURRICULAR

UK Solar Car Team – Electrical AND Programming Team Member:

- Improved reliability of steering wheel by designing detachable throttle/brake daughter boards using Eagle PCB
- Contributed to the development of a RTOS for the car which managed sensor data processing and communication

Energy Conversion/Storage Research Lab (Li-ion / Na-ion Batteries):

- Use of lab equipment/methods such as nanoindentation to judge mechanical properties of possible electrolytes
- Use of programming abilities to assist with material characterization and lab experiments
- Currently assisting a graduate student researching mechanical properties of Sodium Ion Battery Cells

PERSONAL SOFTWARE PROJECTS

GoList (Craigslist Web Scraper in Go): <https://github.com/brennengreen/golist>

- Implemented a web scraper that scrapes posting data from a craigslist category
- Used Golang’s PostgreSQL implementation to categorize all postings in a SQL database
- Maintained an active server for utilizing the web scraper and database using Heroku
- Used Twilio to notify me whenever an item is posted for less than the average price of similar items
- Utilized: Algorithms, SQL / PostgreSQL, Databases, Heroku, Twilio, Go / GoLang, and Web Scraping

Ditto (Discord Media Bot Written in Python): <https://github.com/ditto-dev-team/ditto>

- Used Python to design the backend to safely access the bot’s file structure and store/access media files
- Used Heroku to properly sense when the bot is in use as to save time and money when hosting the bot
- Administrated the version control over the bot to promote proper and safe collaboration amongst the team
- Utilized: UNIX File System, Python, Heroku, Git Version Control, Project Management