

EDUCATION

Lexington, KY **University of Kentucky** **Aug. 2019 – May 2023**

- **Major:** Materials Science and Engineering, B.S. (GPA: 4.0)
- **Coursework:** Programming in C/C++, General Chemistry 1, Spring 2020: Physics 1 and Materials Science

SKILLS

- **Technical:** JavaScript, Python, PHP, Linux, MacOS, Go / GoLang, HTML / CSS, Git, Java, Data Visualization, Unreal Engine 4, Data Pipelines, Systems Design, C / C++, Web Design Fundamentals

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
- Created stunning visualizations in Tableau to demonstrate the power of the software to staff members
- 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
- Leveraged Knowledge of MVC Architecture, Web Debugging, Docker, Dev Ops

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.

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

Extra-Curricular

UK Solar Car Team – Electrical Team Member:

- Revision and design of important circuit boards using Eagle PCB Design software
- Researched Li-Ion battery design and chemistry to help the team make the best decision to power our car
- **Future projects:** Designing the electrical system of our new car, Gato del Sol VII. Designing a sustainable solar powered trailer to pull our car to events

Energy Conversion/Storage Research Lab: Recently joined Dr. Cheng’s research group that focuses on Li-Ion battery development partnered with General Motors. Lab activities include cell construction, materials testing, and structural analysis

Dear Dr.Escobar,

Knowing the world is changing daily, I have had a strong desire to jump head first into the progress the field of engineering is making. For years it has been my goal to do research as both an undergraduate and in the future as a graduate student. I've already started this process as a Bioinformatics Research Assistant during my senior year of high school. And, most recently, I have begun the process of joining Dr. Y.T. Cheng's research group helping to develop Li-Ion batteries. I have a desire to keep pursuing research, I hope to have the opportunity to do a summer REU as well as work an internship in research and development. Being on the cutting edge of the technology frontier is exciting to me and I hope UK will help me continue to pursue these goals.

Sincerely,
Brennen Green
Freshman Engineering Student