Kenneth Harlley

kdh62@cornell.edu   kdharlley.github.io   (607) 379-4445

EDUCATION

Cornell University, College of Engineering, Ithaca, NY   **Expected May 2021**
Bachelor of Science, Computer Science
GPA: 4.129 (Dean's List-All Semesters)

Relevant Courses: Intermediate Design and Programming for the Web, Tools for Operations Research and Machine Learning, Computer System Organization and Programming, Object-Oriented Programming with Data Structures, Introduction to Database Systems (Enrolled), Operating Systems (Enrolled)

ENGINEERING EXPERIENCE

Full Stack Website Developer   **Jan. 2017 - Present**
- Developed Blossom Academy's website which has over 8700-page views using Python (Django), Bootstrap, HTML, CSS, and JavaScript.
- Implemented functions including validation of users; creation of database entries and automation of emails.
- Built, using PHP, JavaScript, HTML, CSS, SQL a website for Cornell's Language Expansion Program's website together with 4 peers.
- Incorporated functions including assignment of security levels and privileges; creation, deletion and modification of database entries; modifiable webpages and initiation and termination of sessions.
- Created an ePortfolio site, a local maintenance portal and a music catalogue with PHP, HTML, CSS, SQL, Bootstrap and JavaScript.

Google, San Francisco, CA, *Engineering Practicum Intern*   **May 2019 - Aug. 2019**
- Processed data from a code-analysis system, used by Google Maps, YouTube and numerous other Google services, to surface relevant findings and link them to other systems.
- Extended aforementioned code-analysis system, using GoLang, to emit additional data.
- Wrote a complex SQL query to present said data on a proprietary visualization platform addressing up to 97.2% of all cases whilst keeping the query maintainable with functions and unit tests.
- Prototyped displaying the data in a Web UI using Java, Guice, Soy, HTML and CSS.
- Practiced software engineering discipline with mercurial, code reviews, daily standups and bug tracking.

Cornell University Sustainable Design, Cornell University, Ithaca, NY, *Member*   **Feb. 2018 – Dec. 2018**
- Engineered, using various tracking technologies and machine learning, high-efficiency HVAC (heating, ventilation and air conditioning) sensors to save Cornell 52,261kWh of energy per year in a team of 10.
- Developed, using Python, predictive algorithm to automate HVAC system using location and calendar data.
- Collaborated with 9 peers to design and produce a $6,000 solar trailer which provides on-the-go sustainable energy, enabling Cornell Grounds to become carbon neutral.

SPECIALIZED SKILLS

Programming Languages (Python, Java, PHP, SQL, Golang, HTML, CSS, C, R); **Frameworks** (Django, Soy, Guice);

VOLUNTEERING EXPERIENCE

Blossom Academy, Kumasi, Ghana, *Web Development Lead*   **May 2018 - Present**
- Cooperate with 4 other leads to run first-ever solely West-African Data Science Accelerator with connections to IBM to help reduce unemployed population of 1.21 million in Ghana.
- Manage and generate company website with over 2300 users.

Teach for Ghana, Teach for All, Accra, Ghana, *Intern*   **May 2018 - July 2018**
- Aggregated close to 100 survey responses with a self-formulated Python script, using Pandas, which will impact 1,327 Ghanaian students.
- Debugged and increased mobile responsiveness of Teach for Ghana site with over 2,000 users and over $20,000 dollars in donations by addressing site scalability, broken links and obsolete pages.