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: 4.088

Relevant Courses: Intermediate Design and Programming for the Web, Introduction to Database Systems, Information Retrieval, Data Structures and Functional Programming, Computer System Organization and Programming, Operating Systems, Introduction to Analysis of Algorithms (Enrolled)

ENGINEERING EXPERIENCE

Freelance Full Stack Website Developer

Jan. 2017 - Present

- Developed Blossom Academy's website which has over 8700 pageviews and 2300 users using Python (Django), Bootstrap, HTML, CSS, and JavaScript.
- Built, using Flask, JavaScript, HTML, CSS, and Naïve Bayes Classifiers, a website to generate grocery lists for users with dietary restrictions together with 5 peers.
- Created an ePortfolio site, a local maintenance portal, a music catalogue, and Cornell's Language Expansion Program's website with PHP, HTML, CSS, SQL, Bootstrap and JavaScript.
- Incorporated functions including assignment of security levels and privileges; creation, deletion and modification of database entries; modifiable webpages, initiation and termination of sessions and automation of emails.

Google, Remote, Software Engineering Intern

May 2020 - Present

- Actualized an API to extract and process loyalty data of millions of Google Fi subscribers with C++.
- Implemented and designed a loyalty page on the Google Fi website, using Soy, HTML and CSS, to show Fi customers personalized loyalty data and rewards.

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, OCaml, PHP, SQL, Golang, HTML, C++, R); **Frameworks** (Django, Soy, Flask);

VOLUNTEERING EXPERIENCE

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.