Kenneth Harlley

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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 (Currently 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 three APIs to extract and process loyalty data of millions of Google Fi subscribers with C++.
- Constructed a pipeline using MapReduce to create and update loyalty data for millions of Google Fi subscribers.
- Implemented and designed a loyalty page on the Google Fi website, using Soy, HTML, CSS and JavaScript, to show Fi customers personalized loyalty data and rewards.
- Conceptualized and set up a database to hold user's loyalty data using scene description language and C++.
- Generated a test system and corresponding UI to sandbox loyalty system using GoLang and HTML.

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.

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.

SPECIALIZED SKILLS

Programming Languages (Python, Java, OCaml, PHP, SQL, Golang, HTML, C++, R); **Frameworks** (Django, Soy, Flask, MapReduce);

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.