**KENNETH HARLLEY**

404A Carl Becker House kdharlley.github.io (607) 379-4445

Ithaca, NY 14853-8401 kdh62@cornell.edu

**EDUCATION**

**Cornell University,** College of Engineering, Ithaca, NY **Expected May 2021**

GPA: 4.05 (Dean’s List-All Semesters)

Bachelor of Science, Computer Science

**SOS-Hermann Gmeiner International College (HGIC),** High School, Tema, Ghana  **June 2017**

Awards: IB Computer Science at a Higher Level (Final Grade: 7 (Excellent)), Certificate of Distinction and Honor Roll in University of Waterloo Math Competitions (Galois and Hypatia), Best Physics and Mathematics Student (June 2017)

***Relevant Courses:*** *Intro to Computing Using Python,**Systems Engineering Project, Multivariable Calculus, Object Oriented Programming with Data Structures, Discrete Structures*

**ENGINEERING EXPERIENCE**

**Full Stack Website Developer**  **Jan. 2017 - Present**

* Developed Blossom Academy’s website 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, Bootstrap, JavaScript, HTML, CSS, a local maintenance portal for SOS-HGIC.
* Incorporated functions including assignment of security levels and privileges; creation, deletion and modification of database entries and initiation and termination of sessions.
* Created an ePortfolio site and Teach for Ghana Foundation’s website with Bootstrap and Squarespace respectively.

**Cornell University Sustainable Design,** Cornell University, Ithaca, NY, *Member* **Feb. 2018 – Dec. 2018**

* Engineer, 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.
* Develop, 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.
* Constructed and installed shelves, charge controller, inverter, batteries and solar panels on trailer with team.

**Teach for Ghana,** Teach for All, Accra, Ghana, *Intern* **May 2018 - July 2018**

* Formulated Python script which aggregated close to 100 survey responses stored in excel document using Pandas.
* 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.
* Compiled a PowerPoint and accompanying report analysing close to 96 different variable pairs which will impact 1,327 Ghanaian students.
* Shortlisted, together with 6 colleagues, 32 fellows from over 600 applicants who will teach over 750 students.

**SPECIALIZED SKILLS**

**Programming Languages (**Python, Java, PHP, SQL); **Frameworks** (Django, Bootstrap); **Relational Database Management Systems** (PostgreSQL, MySQL); **Certified Microsoft Office Specialist**

**LEADERSHIP 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 250 users and 1,500 pageviews.

**PREPARE**, Cornell University Office of Global Learning, Ithaca, NY, *Mentor*  **Aug. 2018**

* Volunteered to facilitate adjustment to college life for students from over 44 countries.
* Organized sporting events, picnics and Q&A sessions for 223 new international students with 50 other peers.