Stephen Adusei Owusu

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EDUCATION

Cornell University – Ithaca, New York, USA   Graduating May 2021
Bachelor of Arts, Information Science & Computer Science
Relevant Coursework : Object-Oriented Programming and Data Structures (Java), Intro to Design and Programming for Web (HTML & CSS), Intermediate Design and Programming for Web (PHP & SQL), UNIX Tools and Scripting, Introduction to Data Science, Introduction to Database Systems.

ENGINEERING EXPERIENCE

Zillow Group, Rental Applications Team – Seattle, Washington   Summer, 2020
Software Development Engineer Intern
- Remodeled an existing address form to add auto-fill functionality using a Java web service and React.
- Devised new keyboard shortcuts to allow navigation accessibility on the Zillow website while working with three interns on a hackweek project.
- Managed the state of Zillow's React application while requesting and receiving information using React-Redux.

Cornell University, Information Technology Services – Ithaca, New York   Summer, 2019
Software Engineer Intern
- Developed a new user interface for audio visual control panel using React and Node-Red programming frameworks.
- Mounted a newly created audio visual control program for audio visual devices in classrooms on a raspberry pi.
- Redesigned a flow program to send and receive signals using Node-Red.

SoNIC – Ithaca, New York   Summer, 2018
*Research Assistant under **Professor Hakim Weatherspoon** - NETLab*
- Worked in a team of two to research the physical layer of a 10 G Network stack by studying the inter-packet gap distribution changes in packets before and after passing it through a router.
- Discussed emerging blockchain technology and their applications with professionals in Computer Science.
- Encoded and sent data packets through a router using C and Unix technologies.

PROJECTS

Search Engine
- Built a search engine using an inverted index from my transcript to efficiently compute IDF values.
- Implemented Levenshtein edit distance algorithm to be used as a measure of finding similarities between queries and tokens in a transcript.
- Modified the cost schema of the edit distance algorithm to influence the cost of actions which would allow my search engine to return desired results.

Data Visualization
- Built a Mercator projection of the world map from paths using d3 on TopoJson files.
- Colored the projection with different hues of blue to indicate levels of happiness in each country using data of world happiness scores.

SKILLS AND INTERESTS

- **Programming languages**: Python, Java, C++, HTML 5, CSS 3, PHP, React, R.
- **Worked with**: C, JavaScript, Bash, Node-Red.
- **Interested in**: Web Development, Data Science, Data Visualization.
- **Fluent in:** English and Twi.

CAMPUS INVOLVEMENT

- **International Students Orientation(PREPARE)**, *Mentor*, Cornell University, August 2019
- **Big Red Hacks Hackathon**, *Participant*, Cornell University, Spring 2018
- **Ghanaians at Cornell E-board**, *Secretary*, Cornell University, August 2018-Present