# TAHMID EFAZ

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## EXPERIENCE

### Lead Computer Science Teaching Assistant
*August 2016 – Present*

*Berea College, Berea, Kentucky*

Collaborated on a team of three to manage 20 teaching assistants and coordinated weekly meetings.
Assist students in the evening lab to enable them to successfully solve homework problems.

### Software Engineering Intern
*June 2018 – August 2018*

*NASA - National Aeronautics and Space Administration, Greenbelt, Maryland*

Designed and developed full-stack web applications to aid the efficient visualization of large satellite datasets.
Acted as the primary Software Engineer in a team of five research scientists to maintain web applications that facilitated the observation of global phenomena.

### Student Software Developer
*August 2017 – May 2018*

*Berea College, Berea, Kentucky*

Utilized the Agile (SCRUM) development methodology to design and develop web applications used by more than 300 faculty and 1600 students.
Improved efficiency and usability of applications used by faculty, staff, and students.

### Computer Science Research Intern
*May 2017 – July 2017*

*University of North Carolina at Charlotte, Charlotte, North Carolina*

Utilized the NVIDIA CUDA framework to develop parallel applications for the GPU.
Improved runtime of sophisticated 3D mapping algorithms by 50 - 75 times (from 4 hours to 3.5 minutes) by making them highly parallel using the CUDA framework.

## OPEN SOURCE CONTRIBUTIONS

### Mozilla Firefox Developer Tools

Fixed one accessibility issue in the Mozilla Firefox Debugger that facilitates the screen reader in describing results from file search.

### Co-Authored Two Books

Helped write the books "C++ for Python Programmers" and "Data Structures and Algorithm with C++" which will be available at the Runestone Academy. Converted Python and Java codes to C++.

## PROJECTS *(More projects available on my GitHub at http://github.com/tahmidefaz)*

### Greenaive

An application to help the user determine if an object should go to the recycle, trash or compost bin. It asks the user to take a picture of the item and uses image recognition and machine learning to decide the right bin for the object. Completed in less than 6 hours. Won "Best Sustainability Oriented Project" at BCHacks 2017. Project link: http://greenaive.co. *[Python, Flask, Machine Learning, Heroku]*

### Sentiment Dashboard

A web application that uses Machine Learning to analyze Sentiment on tweets or files of user's choice and visualizes the measured sentiment using charts. It can understand 103 different languages. Project link: sentiment-dashboard.herokuapp.com. *[Machine Learning, Sentiment Analysis, Python, JavaScript, Flask, Twitter API, Chart.js, Heroku]*

### Earthquake Bot

A bot that posts real-time earthquake alerts on Twitter (@GlobalQuakeBot) and shows a Map of the location of the epicenter. Receives over 50K organic impressions per month. *[Python, USGS API, Twitter API, Google Maps API, Amazon Web Services]*

## TECHNICAL SKILLS

**Languages**: Python (most comfortable), C++, JavaScript, R (Data Analysis)

**Web Technologies:** HTML, CSS, Flask, Bootstrap, React (basics), Vue.js (basics), jQuery

**Amazon Web Services:** EC2, S3, Lambda (Serverless)

**Other Technologies:** Git, Linux, Command Line

## EDUCATION

### B.A. Computer Science, Berea College
*Expected Graduation May 2019*

Relevant courses: Data Structures, Software Design and Implementation, Computer Networking, Programming Languages, Database Systems, Software Engineering, Data Analytics (Machine Learning), Computational Intelligence, Computational Complexity (enrolled), Management Information Systems (enrolled)