

# Alemayehu Bogale

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## Education:

University of Chicago  
Class of 2020  
B.S in Computer Science and Physics  
**Honors:**  
QuestBridge Match Scholarship-  
In 2016, the acceptance rate was 5.3%

## Relevant Courses:

**Computer Science:**  
Networks, Distributed Systems,  
Computer Systems  
**Physics:**  
Modern Physics, Classical Mechanics,  
Intermediate Mechanics, Intermediate E&M

## Skills:

**Languages:**  
Proficient: Python, C  
Familiar: Java, Javascript, HTML, CSS, Racket  
**Tools & Frameworks:**  
NumPy, SciPy, Pandas, GIT, GDB, Valgrind, Proxy  
**Systems:** Linux, OSX

## Work Experience

### 1 FLASH Center for Computational Science, Research Assistant | Chicago, IL | June 2017 - Present

- Built [PRaLine](#), a Python based Proton Radiography Reconstruction tool for experimental purposes
- Package was developed for experimental purposes based on [Graziani et al. 2017](#)
- Plotted reconstructed magnetic fields using scientific computing packages in python
- Presented a poster at the NIF/JFL User Group Meeting with over 200 attendees



### 2 Google Computer Science Summer Institute, Student | Chicago, IL | June 2016 - August 2016

- Participated in an intensive programming institute, learning web-app development in HTML, CSS, JavaScript, Python and Google App Engine from Google engineers
- Worked with a group of 3 to develop [Energize!!!](#), a full feature web app, with a Python backend, using the Jinja framework for HTML templating and presented it to an audience of Google engineers



### 3 Fermi National Accelerator Laboratory, TARGET Intern | Batavia, IL | June 2015 - August 2015

- Designed web pages using Microsoft Sharepoint, WordPress, and Drupal for the Feynman Computing Center
- Constructed various electronics including radios and batteries
- Programmed simple robots and trained in AutoCad Design



## Activities/Leadership

### Femmes, Outreach Director | Sept 2017- Present

- Led outreach to schools in the Chicago School Public System to recruit girls for our workshops and events
- Taught a 7 week workshop that introduced middle school girls at Kenwood Academy to computer science

### Refugee Relief Club, President | Sept 2013 - Jun 2016

- Founder of the club and fundraised \$2,000 for refugee centers throughout Chicago
- Tutored, taught English, and furnished apartments for refugees

### By The Hand, Volunteer | Jan 2014 - Feb 2016

- Tutored 20 elementary school students in Chicago's South and West Side for 5 hours per week
- Provided a safe and stable after-school environment by leading Bible study and serving meals

### Whitney M. Young Varsity Football | July 2012 - Sept 2016

- Balanced 40+ hours of practice a week, full AP course load, and a 20+ hour work schedule
- Received All-Academic State Team honors

## Coursework Projects

### First Year

- Chess Board Game, Racket
- User-Space UNIX shell, C
- Cache Simulator + Optimization, C

### Second Year

- Simplified NetCat Client Server Model, C
- MTCP Client Implementation, C
- Man in the Middle Attack Implementation, Python