# EMMANUEL LOTUBAI

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# **PROFESSIONAL OBJECTIVE**

Computer engineering student at the University of Utah with a passion for problem solving. Seeking to utilize my skills in systems and software engineering.

#### KEY SKILLS

- Programming languages: C#, Java, C++, FDTD
- IDE: Visual Studio, Eclipse, MATLAB, LUMERICAL
- Web development: PHP, HTML, CSS
- Microsoft Office: Word, Excel, PowerPoint
- Multilingual: English, Swahili

#### **EDUCATION**

### **Bachelor of Science: Computer Engineering**

University of Utah, SLC, UT

- Relevant coursework: Object Oriented Programming, Software practice I/II, Computer Organization, Computer Systems, Computer Design Lab, Embedded Sys Design, Micromachining, Image Processing Basic, and Intro Semicond Phys
- Scholarships: Summer Science Bridge Program and One Refugee

#### **PROFESSIONAL EXPERIENCE**

#### **Donor Database Intern**

**Granite Education Foundation**, SLC, UT

August 2020 - Present

Expected Graduation: Fall 2021

- Wrote a C# program that imported constituent's donation information. This program went through 13,000+ constituents. This process cut down the donation information confirmation by 800+ hours.
- Created a C# application that received donation information from a constituent. This application provided an excel sheet that was uploaded instead of entering the information manually. This eliminated 200+ hours per month of menial labor for the Foundation's staff & volunteers.

Research Assistant July 2015 - April 2020

## Department of Chemical Engineering, University of Utah

- Studied plasmonic nanoparticles and simulated aluminum bowtie nano-antennas in the ultraviolet region for excitation and emission enhancement factors. Simulated the structures in Lumerical FDTD solutions and analyzed the data by writing MATLAB functions. The simulation results showed that the optimal geometry for the structure is a gap size of 20nm, a structure size of 20nm, and an apex angle of 60°.
- Coauthor: "Incident wavelength and polarization dependence of spectral shifts in β-Ga2O3 UV photoluminescence" and "UV fluorescence enhancement by aluminum and magnesium equilateral bowtie nanoantennas".

#### **Systems and Infrastructure Intern**

June 2018 - August 2018

#### O.C. Tanner Company, SLC, UT

• Studied IP address management. Increased my networking knowledge by cementing my understanding of DNS and DHCP concepts.