# Clement Nyanhongo

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#### **EDUCATION**

#### Dartmouth College, Hanover, NH

Major: BE in Computer Science and Engineering

Relevant Coursework: Scientific Programming, Object Oriented Programming, Systems, Engineering Statistics

GPA \*\*\*4.0

**Expected June 2018** 

Probabilistic Systems, Differential Equations, Distributed Systems, Linear Algebra, Information Technologies, Microeconomics, Digital Electronics, Full Stack Web Development, Machine Learning, Database Systems.

Computer skills: Matlab; C; Java; Web technologies such as HTML/CSS/ Node.js/JavaScript/React/Redux/ APIs/MongoDB;

React-Native; Statistical software such as R, STATA; Solidworks; VHDL(Hardware descriptive language)

### **WORK EXPERIENCE**

### Student IT Consultant, Dartmouth Information Technology Services

Provided technical support for classroom equipment, network connection and software installation tasks.

June - Sept

• Fixed Windows and Mac software issues for students and helped to install security updates for various systems

2017

### KPMG, Corporate Finance intern, (Harare, Zimbabwe)

• Analyzed financial data of multiple companies to identify historical and operational trends.

June - Sept

 Prepared valuations and due diligence reports for clients, and drafted presentations for mergers and acquisitions, debt equity swaps and IPOs 2016

### Agua Inc. Development Group Engineering Intern, (Boulder, Colorado)

• Contributed to the front-end development of the company's website using CSS/HTML and JavaScript.

June-Sept 2015

Designed Auto-Cad drawings for construction of new structures and dumping sites using SolidWorks

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## Lab and TA assistant, Dartmouth College

Teacher Assistant for Intro to Programming (ENGS 20) and Lab Assistant for System Dynamics (ENGS 22) (directing lab procedures and guidance on use of oscilloscopes, breadboards, circuits etc.)

Jan 2015 – present

#### PROJECT EXPERIENCE

- Enigma Machine (Digital Electronics, Spring 2017) In a team of two, we created a polyalphabetic cipher in style of an Enigma machine. The system used serial communication to receive, encode and transmit ASCII characters from hexadecimal x20 x7E. Implementation was done using VHDL and an fpga to simulate rotors, and circuit wirings.
- **Health Recommender Systems (Modern Information Technologies, Winter 2017) -** Designed a statistical health recommender system that mines data from clinical records to give insights and recommendations on health policies. The implementation was done using R and open source health data. Regression and neural network packages from R helped to discover trends.
- Web Development and Application Design (2017) Created multiple web applications for various assignments. This involved front-end and back-end design using React and Mongo. A significant project is an Officehour app, which we designed to help schedule office hours and maximize efficiency between users. I'm also creating an agricultural app to facilitate equipment sharing.
- Data structures and algorithms (Object Oriented Programming, Winter 2016) Carried out multiple assignments on game development (Connect-four game, Kevin Bacon and Kalah); encoding and compression (Huffman coding); cryptography; graph theory; algorithm analysis i.e. K-means, sorting and the use of graphical user interface (GUIs).
- Semiconductor thin films (Material Science, Spring 2016) Worked with a team of four students to optimize crystallization semiconductor thin film materials. Application of results could boost efficiency of on-chip data links and create cost-effective solar cells).

#### **HONORS and LEADERSHIP**

- Joshua Nkomo Scholarship Recipient- Awarded to the top 50 high school academic achievers in Zimbabwe. Advanced level 4/4 distinctions, Ordinary level 12/12 distinctions.
- United States Achievers Program Scholar-Highly selective program to sponsor high achieving students in university applications.

#### **EXTRACURRICULAR ACTIVITIES**

- Regular participant in Hackathons, Digital Arts Lab Pitch competitions and Thayer Consulting Case Competitions.
- Voluntary project Drafted and set up a poultry farm project in Nicaragua through a non-profit called Bridges to Community.
- Undergraduate Advisor Provide individual support to residents in meeting their personal, social and academic needs.
- Sport Activities: Cricket player for the Dartmouth Cricket Club