# Please contact me at <u>mauricebukenya@gmail.com</u> for complete version

## MAURICE BUKENYA

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#### **EDUCATION**

Tufts University - Medford, Massachusetts, USA

Expected May 2018

o Master of Science in Chemical Engineering

Tufts University - Medford, Massachusetts, USA

Sept 2013 - May 2017

- o Bachelor of Science in Chemical Engineering (xxxxx)
- O XXXXX

African Leadership Academy - Johannesburg, South Africa

Sept 2010 – Jun 2012

- o CIE Courses in Chemistry, Mathematics & Biology; Entrepreneurial Leadership & African Studies
- O XXXXX

#### **ENGINEERING EXPERIENCE**

Nanobiofabrication Laboratory - Graduate Research Assistant, Tufts University Medford, MA Nov 2015 - Present

- o Fabricate opal-structured hydrogel films for application in biosensing and reagentless detection
- o Researched protein conjugation on PEG-Chitosan microparticles for biomedical applications (Undergraduate)

Chemistry Department - Graduate Teaching Assistant, Tufts University Medford, MA

Sept 2017 – Present

- o Instruct two Chemistry laboratory courses weekly
- o Grade Laboratory reports, quizzes and exams

Koch Institute for Integrative Cancer Research at MIT - Intern Cambridge, MA

Jul 2017 – Aug 2017

- o Conducted Seq-well, a single cell RNA sequencing process
- o Utilized Languages R and MatLab to cluster single cell data in order to study the impact of sequencing depth on RNA-Seq quality

National Institutes of Health (NIH) - Engineering Intern Bethesda, MD

Jun 2016 - Aug 2016

- o Utilized microfluidic techniques to encapsulate cells and beads in droplets (Drop-seq) using PDMS chips
- o Conducted photolithography to make silicon wafer templates for making device chips
- o Enhanced efficiency of content-based fusion and sorting of droplets using dielectrophoresis
- o Presented work to research group throughout the internship and to the wider NIH community on poster day

Tullow Oil - Information Systems Intern Kampala, Uganda

Jun 2014 – Aug 2014

- o Offered first-line IT support at the main offices in Kampala and at the major field sites
- o Developed a requisition tool for printer supplies using Excel Visual Basic Applications

## LEADERSHIP EXPERIENCE

Biomedical and Chemical Engineering Society at Tufts - Secretary Medford, MA

Aug 2017 – Present

o Manage communication channels including email and social media platforms

National Society of Black Engineers, Tufts Chapter – Secretary and Mentor Medford, MA Sept 2016 – May 2017

- o Coordinated meetings, resources and opportunities for the 30-member group
- o Guided and supported lowerclassmen through the club's mentorship program

Tufts University - Resident Advisor Medford, MA

Aug 2015 – Nov 2016

o Planned and implemented community building programs, and acted as a student resource for 47 residents

Global Health Corps – Intern Kampala, Uganda

Mar 2013 – Aug 2013

o Developed and organized training and networking programs for Uganda-based professionals (fellows)

# **SKILLS**

Laboratory: Cell Culture, RNA-seq, Mass Spectrometry, soft lithography, Spectroscopy, SEM imaging

Computer/ Programing: Matlab, R, Simulink, Mathcad, MS Excel, SuperPro Designer