# Please contact me at mauricebukenya@gmail.com for full version

# MAURICE BUKENYA

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### **EDUCATION**

Tufts University - Medford, Massachusetts, USA

Expected May 2018

Master of Science in Chemical Engineering

Tufts University - Medford, Massachusetts, USA

Sept 2013 - May 2017

- o Bachelor of Science in Chemical and Biological Engineering
- Xxxx

African Leadership Academy - Johannesburg, South Africa

Sept 2010 – Jun 2012

- o CIE Courses in Chemistry, Mathematics & Biology; Entrepreneurial Leadership & African Studies
- o Awards: Winner of Life Sciences Olympiad in Southern Africa (2012)

### ENGINEERING/ RESEARCH EXPERIENCE

Nanobiofabrication Laboratory - Graduate Research Assistant, Tufts University Medford, MA Nov 2015 - Present o Fabricate and study opal-structured hydrogel films for potential application in bio-sensing and reagent-less

detection

o Researched protein conjugation on PEG-Chitosan polymeric microparticles for biomedical applications (Undergraduate)

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

Sept 2017 – Present

- o Instruct Chemistry laboratory course weekly
- o Grade Laboratory reports, quizzes and tests

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

Jul 2017 – Aug 2017

- o Conducted 'Seq-well' for the purpose of single cell RNA sequencing
- o Utilized Languages R and MatLab to cluster single cell data and to study 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 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 in the major field sites
- o Developed a requisition tool for printer supplies using Excel Visual Basic

# LEADERSHIP EXPERIENCE

National Society of Black Engineers, Tufts Chapter – Secretary and Mentor Medford, MA

Sept 2016 – Present

- 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: Mass Spectrometry, soft lithography, Spectroscopy (NMR &IR), Cell Culture

Computer/ Programing: Matlab, R, Python (learning), Simulink, Mathcad, VBA & MS Excel, Superpro Designer