

Nana Kwasi Kwakwa

Tufts University, 314 Hill Hall, MA 02155 • (413)544-3460 • nana.kwakwa@tufts.edu

EDUCATION

Tufts University, Medford, MA

Bachelor of Science in Electrical Engineering expected 2014

GPA : 3.19

RELEVANT COURSEWORK & PROJECTS

Electronics I & II(with lab), Data Structures, Introduction to Biomedical Engineering, Introduction to Digital Logic Circuits (with lab), Power Systems, Microprocessor Architecture (with lab), Linear Systems, Optics & Wave Motion, Feedback & Control Systems, Communication Systems, Digital Signal Processing, Introduction to VLSI(Very Large-Scale Integration)

- Currently working on an improved wireless Near-Infrared spectroscope for monitoring brain activity.
 - Simulated an entire communication system to transmit data packets over a channel and receive them on the other side.
 - Designed and built an autonomous bot to detect toxic sites in a simulated environment.
 - Designed and built a working speaker from household items.
 - Designed and built a working AM transmitter.
-

LEADERSHIP

Tufts Office of Residential Life and Learning

Resident Assistant (August 2012 – Present)

- Manage a university residence hall floor of 52 undergraduate students.

Tufts University Dining Services

Student Manager (January 2012 – Present)

- Supervise general workers on duty and maintain working standards.

General Worker (September 2011 – December 2011)

Tufts African Students Organization

Co-president (2011-2012 Academic Year)

- Coordinate a team to educate the community on the culture, issues, and heritage of Africa.
 - Doubled membership during term.
-

EXPERIENCE

Tufts Summer Scholars (Summer 2013)

- Developed a wireless Near-Infrared spectroscope for monitoring brain activity using time-division multiplexing.

National Collegiate Research Conference, Harvard University (January 2013)

- Presented summer research to a body of peers and experts in various STEM fields.

Advanced Integrated Circuits and Systems Laboratory, Tufts University May 2012 – August 2012)

Research Intern

- Characterized optical detectors to determine the feasibility of their use in a Near-infrared spectroscope.
-

SKILLS

Computer & Programming: Microsoft Office Suite Programs, Altium Designer, MATLAB, Cadence PSpice, C++ & AutoCAD