

KHOA NGUYEN

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Mobile: 0928 057 600

EDUCATION

Vanderbilt University, Nashville, TN

Majors: Computer Science, Chemistry

Degree Expected Term: Spring 2020

Overall GPA: 3.74

Computer Science GPA: 4.0

Relevant courses: Data Structure, Discrete Structure, Linear Algebra, Statistics

Saint Joseph's Institution International (SJII), Singapore

Le Hong Phong High School, Ho Chi Minh City, Vietnam

HONORS AND AWARDS

- Dean's list – Vanderbilt University - Fall 2016, Fall 2017, Spring 2018, and Fall 2018
- Bronze Medal in Singaporean Chemistry Olympiad 2014
- High Distinction in Australian Mathematics Competition 2014
- Recipient of the Wong Heng Ning Kevin Scholarship for the IB program, SJII Singapore 2014 (SGD \$100,000)

WORK EXPERIENCE

Dr. Eva Harth's Lab – Vanderbilt University

January 2017 – May 2017

Was an undergraduate researcher working on the production of precise drug loaded microparticles using piezoelectric Inkjet printing. Helped in the development of a new ink mixture composed of commercially purchased substrates and monomer building blocks that can undergo rapid crosslinking under safer and biologically inert conditions. Also helped collect data on the degree of swelling, compressive modulus, and drug loading and encapsulation efficiency of the hydrogel. Contributor of an in-progress article on the project.

Dr. Rizia Bardhan's Lab – Vanderbilt University

August 2017 – April 2018

Was undergraduate researcher working on two projects with two supervising graduate students. The first project focused on the development and application of core-shell gold nanostructures (plasmosomes) as a platform for photothermal immunotherapy. The plasmosomes will be targeted with an immunomodulator to aid in manipulating the immune response in favor of treating cancer. The second project aims to exploit the nanoparticles' ability to enhance an optical signal from surface enhanced Raman spectroscopy (SERS) by a factor of 10^{11} for the purposes of detecting trace quantities of bioanalytes within the human body, in the form of a 'lab-on-a-chip' microfluidic biondiagnostic device.

General Chemistry Stockroom – Vanderbilt University

January 2018 – December 2018

Worked as a stockroom assistant for CHEM 1601L/1602L. Duties included sorting and distributing appropriate glassware and equipment for each lab period, preparing chemical reagents, and grading certain lab results.

Eskind Biomedical Library – Vanderbilt University

August 2018 – December 2018

Worked at the circulation desk at Eskind Library. Duties included checking out books, answering inquiries and providing counsel on certain fundamental medical topics to patrons looking for research material.

SKILLS

- Proficiency in C++ programming.
- Experience with Java, Python, HTML, Matlab
- Proficiency in English and Vietnamese

EXTRACURRICULAR AND WORK EXPERIENCE

- Alternative Spring Break (ASB) at Vanderbilt: volunteered at the Padre Island National Seashore
- Vietnamese Student Association, Vanderbilt Chapter
- Engineers Without Borders, Vanderbilt chapter