

---

# BIHAN ZHUANG

---

## EDUCATION

### DUKE UNIVERSITY, DURHAM, NC

B.S. in Computer Science

B.S. in Statistical Science

Minor in Mathematics

#### RELEVANT COURSEWORK:

Software Design and Implementation

Intro to Artificial Intelligence

Computer Architecture

Discrete Math in Computer Science

Data Structures and Algorithms

Advanced Intro to Probability

Ordinary and Differential Equations

Linear Algebra and Differential Equations

Computational Methods in Engineering

Fundamentals of ECE

Machine Learning (Coursera)

Full Stack Web Development (Coursera)

#### CONTACT INFORMATION:

603-369-7715

bihan.zhuang@duke.edu

github.com/bihanzhuang

linkedin.com/in/bihan-zhuang

---

## SKILLS

Java, HTML, CSS, JavaScript, jQuery,  
Bootstrap, Materialize, Flask, Heroku,  
Node.js, MATLAB, Octave, Python,  
Arduino

---

## LEADERSHIP EXPERIENCE

### VICE PRESIDENT, SOCIETY OF WOMEN ENGINEERS (SWE)

Apr 2016 – present

Organized the 2016 annual trip to SWE  
National Conference; hosted on-campus  
networking events with tech companies in  
the research triangle.

### TREASURER, HOUSE COUNCIL

Sep 2015 – May 2016

Managed the house recreational fees and  
organized events for 90 residents.

---

## COMPUTER SCIENCE EXPERIENCE

---

### RESEARCH ASSISTANT, DUKE INTELLIGENT MOTION LAB

Dec 2016 – present

Optimizes a clinical decision support framework in stroke treatment that can dynamically recommend optimal treatment plans with respect to both patient outcomes and expected treatment cost. The system uses POMDP and was written in Python.

### 1<sup>ST</sup> ANNUAL IASA STUDENT ARCHITECT

June 2016 – Sep 2016

Project: Grocery store shopping app solution architecture. Key Features: Allows the customers to scan items' barcode while they shop, submit orders on mobile devices, and check out on the devices or kiosks without having to wait in long lines. Native app: frontend – iOS in Objective C or Swift, Android in Java; backend – Node.js; payment API – Stripe's API.

### WEB FRONTEND DEVELOPMENT INTERN, 35 HULIAN, XIAMEN, CHINA

July 2016 – Aug 2016

Obtained insight working in a well-known company; used HTML, CSS, JavaScript, jQuery, and front-end frameworks such as Bootstrap and Materialize to make responsive websites.

### ARDUINO ROBOT DESIGNER

Oct 2016 – Dec 2016

Designed, assembled, coded an Arduino robot that line-follows using QTI sensors (forward, backup, turn, stop), detect objects' height using IR sensors, serial send and receive messages from other robots using Xbee module, and display messages on LCD.

### MEMBER, DUKE MACHINE LEARNING AND DATA SCIENCE CLUB

Nov 2016 – present

Works on a project regarding natural language processing.

---

## PROJECTS

---

### MBA DEADLINES

Jan 2017

Building an all-in-one MBA application platform with two Duke Fuqua MBAs for a startup.

### JUSTFORUS – PLAN REUNIONS

Jan 2017

Building a web app with Flask, python and MySQL to help people plan reunions with ease.

### PERSONAL WEBSITE

Jan 2017

View at <https://bihanzhuang.github.io/> Built with Bootstrap and jQuery. My personal hub for displaying my background, projects and passion in life.

### RANDOM QUOTE GENERATOR

Jan 2017

Simple random quote generator built with Bootstrap, jQuery and deployed by PHP and Heroku. View at <https://rdm-quote.herokuapp.com>

---

## OTHER EXPERIENCE

---

### RESEARCH ASSISTANT, THE YOU LAB, DUKE BME DEPARTMENT

Jan 2016 - present

Dynamically model the growth rate dependence of beta-lactam induced lysis in E.coli bacteria; codes and operates the TECAN EVOWARE robotic system for daily experiments. Co-author of the paper to be published.

### LINEAR ALGEBRA TUTOR, CHINESE TUTOR, DUKE ACADEMIC RESOURCE CENTER

Aug 2016 – present