# Bihan Zhuang

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### **EDUCATION**

Duke University, Durham, NC

Aug 2015-May 2019

B.S. in Computer Science, B.S. in Statistical Science and minor in Mathematics

Relevant Coursework:

Computer Architecture, Data Structures and Algorithms, Computational Methods in Engineering, Fundamentals of ECE, Advanced Probability, Ordinary and Differential Equations, Linear Algebra and Differential Equations.

Online Independent Coursework: Machine Learning, Full Stack Web Development.

Computer Skills: Java, C, HTML/CSS, JavaScript, MATLAB, Octave, Python

GPA: 3.97/4.00 Honor: Dean's List with Distinction

Bishop Brady High School, Concord, NH (GPA=102/100)

Aug 2013-Jun 2015

Washougal High School, Washougal, WA (American Field Service (AFS) Exchange Student) Sep 2012-Jun 2013

# ENGINEERING AND RELATED EXPERIENCE

#### 1st Annual IASA ITARC Southeast, Student Architecture Showdown

June 2016-Sep 2016

- Project: Grocery store shopping app solution architecture
- Key Features: Allows the customers to scan items' barcode (UPC) while they shop, submit orders on mobile devices, and check out on the devices or kiosks without having to wait in long lines
- Key aspects of Architecture: Conceptual, Information, Software, Security
- Gained hands on experience in IT architecture through working with a professional mentor from Bank of America
- Collaborated with two other Duke students

## Designer, Arduino Robot

Oct 2016-Dec 2016

Designed, assembled and coded an Arduino robot that is able to follow lines using OTI sensors (forward, backup, turn, stop), detect the height of objects using IR sensors, serial send and receive messages from other robots using Xbee module, and display messages on LCD.

# Shadow Intern, Web Frontend Developer, 35 HuLian Internet Company, Xiamen, China

July-Aug 2016

- Obtained valuable knowledge about website development industry in a well-known company in China
- Gained insight into developing web sites and UI design

## Research Assistant, the You Lab, Duke Center of Genomic and Computational Biology

Jan 2016-present

- *Project*: Dynamically model the growth rate dependence of beta-lactam induced lysis in E.coli bacteria
- Uses machine learning algorithms to fit large amount of data to the model as well as to understand the reason behind
- Codes and operates the TECAN EVOWARE robotic system for daily experiments
- Co-author of the paper to be published

# ACTIVITY AND LEADERSHIP EXPERIENCE

## Vice President, Society of Women Engineers (SWE)

Apr 2016-present

- Organized the 2016 annual trip to SWE National Conference in Philadelphia
- Hosted campus networking events with tech companies

#### Peer Tutor of Linear Algebra and Chinese

Aug 2016-present

Member, Duke Machine Learning and Data Science

Nov 2016-present

Member, Engineering World Health

Sep 2015-Oct 2016

Developed a belt-like device for measuring the number of breathes per minute on young pneumonia patients in third world countries

**Design for America: Energy Team** 

Sep 2015-Dec 2015

Treasurer, House Council

Sep 2015-May 2016

### **OTHER SKILLS**

Bilingual in Chinese and English