# Raeedah Choudhury

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# **EDUCATION**

# GEORGIA INSTITUTE OF TECHNOLOGY

BS IN BIOMEDICAL ENGINEERING

May 2018 | Atlanta, GA

GPA: 3.79

Minor in Computer Science Graduated High Honors

# SKILLS

#### **PROGRAMMING**

Assembly • Java • MATLAB • C VHDL • Verilog

#### COMMUNICATION

Technical Writing • SolidWorks
Customer Service • Spanish • Bengali

# **COURSEWORK**

#### **ENGINEERING**

Capstone

Biomaterials

Problems in Biomedical Engineering Intro to Biomedical Engineering Design

Biotransport

Biomechanics

Cell and Molecular Systems Physiology

Systems Physiology

Quantum Physiology Labs I & II

Systems Modeling

Conservation Principles

Material Science

Multivariable Calculus

Differential Equations

Statistics

Survey of Organic Chemistry

Statics

Instrumentation and Electronics Lab

Circuits and Electronics

Thermodynamics

Aerodynamics

#### **COMPUTER SCIENCE**

Advanced Computer Organization

Processor Design

Digital Circuit Design Lab

Design of Operating Systems

Systems and Networking

Computer Organization and Programming Object Oriented Programming

Computing for Engineers (Teaching Asst)

## **PROJECTS**

#### **CAPSTONE** | PEDIATRIC INTUBATION

Jan 2018 - May 2018 | Atlanta, GA

- Worked to improve intubation techniques for pediatric patients to decrease trauma and insertion times
- Developed working prototype of laryngoscope featuring a sheath for an endoscopic camera, channel for endotracheal tube, and angulation piece for adjusting angle of the endotracheal tube once inside the glottic opening

# BIOMEDICAL ENGINEERING DESIGN | MEDICAL DEVICE REDESIGN

Jan 2017 - May 2017 | Atlanta, GA

- Worked with a team to design assistive tool for applying peripheral vein catheters to increase accuracy and provide stability in high-stress environments such as ambulances.
- Made 3D printed prototype and proof-of-concept for near-infrared vein locator

# PROBLEMS IN BIOMED ENGINEERING | Concussion Prevention

Aug 2016 - Dec 2016 | Atlanta, GA

- Worked with a team to design a transcranial magnetic stimulation device for athletes to prevent long-term brain damage from concussions.
- Conducted mathematical models of diffuse axonal injury and created circuit model of action potentials through interacting neurons.
- Presented work at Tech4Good Showcase December 2016.

# **EXPERIENCE**

# GEORGIA TECH | RESEARCH ASSISTANT, HAIDER LAB

June 2017 - August 2017 | Atlanta, GA

- Wrote MATLAB code to process experimental data.
- Worked to quantify relationship between change in pupil size of mice with performance during a task.

#### **GEORGIA TECH | TEACHING ASSISTANT, CS 1371**

August 2016 - May 2018 | Atlanta, GA

- Conduct recitations with prepared materials and activities.
- Host office hours to assist students on homework.
- Write upcoming homework and test problems with solution code

#### MCDONALD'S | CREW MEMBER

May 2016 - Aug 2016 | Katy, TX

- Took orders and payments for drive thru and lobby.
- Prepared drinks and serve orders.
- Maintained cleanliness of kitchen, drive thru, and lobby.
- First non-academic job, often received manager's recognition.

#### **KROGER** | CASHIER

May 2016 - Aug 2016 | Katy, TX

- Customer checkout at traditional and self-serve stand
- Provided assistance for customers to ensure they have the best experience.

### **BEST IN CLASS EDUCATION | TUTOR**

Jan 2015 - Mar 2015 | Katy, TX

• Taught and assisted students grades K-12 in mathematics.