

# Ali Mirzazadeh

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(336)-529-0307

Atkins Academic & Technology High School

Major: Engineering

North Carolina School of Science and Mathematics Online Program

Georgia Institute of Technology

Major: Computer Science B.S. Minor: Biomedical Engineering

Graduated: June 2018

GPA: 4.00

Graduated: May 2018

Graduating: May 2022

GPA: 4.00

## Awards and Recognition

**Georgia Tech Stamps President's Scholar | Current**

**Atkins High School Valedictorian | 2018**

**National Merit Scholar | 2017**

## Research Experience

**Wake Forest Institute for Regenerative Medicine | 2017**

Interned for five weeks over the summer (11<sup>th</sup> grade), working on Body-On-a-Chip technologies

Task was to devise a parallel microfluidic circuit that correctly controls fluid exposure to each organoid chamber

**First author in abstract** submitted to annual NC Tissue Engineering & Regenerative Medicine Conference

**NCSSM Summer Research Internship Program – Theoretical Mathematics | 2017**

Presented research on optimization of Circular Golomb Rulers at NCSSM Research Symposium, 2017

## Entrepreneurial Experience

**Étude, by JADE Technologies | 2018 - present**

Co-founder of startup, our current project is Étude, a desktop software that utilizes machine learning and AI to automatically highlight key lines and answers open ended questions regarding the document

**Placed 3<sup>rd</sup>** at Georgia Tech's Annual Appathon Competition, 2018

**Placed 1<sup>st</sup>** at Georgia Tech's Inaugural Catapult Competition, 2019

## Cocurricular Activities

**Problems in Biomedical Engineering (BMED2250) Final Project | 2019**

Devised a method to monitor tremors for Parkinson's patients to help clinician with levodopa prescription

Researched, designed, and created JaMe, a device that uses flex sensors to accurately measure jaw tremors

Modelled simulations using MATLAB and processed microcontroller signal using Fast Fourier Transform

## Extracurricular Activities

**Georgia Tech Bits of Good – Bootcamp | 2019 - present**

Part of rigorous bootcamp program that provided a comprehensive introduction to web development

Through this program, I have become familiar with HTML, CSS, Javascript, NodeJS, Mongo, Express, and React

Currently I am applying my web development skills to help a local non-profit organization

**GT Biomedical Engineering Robotics Club | 2018 - present**

Project involves researching, designing, and constructing an artificial arm that would enable disabled people to regain most functionalities of their lost limb; I am a part of the hand sensing and feedback sub-teams

Utilize resistive touch screen technology to create a grid of touch sensors that provide feedback to user

**Toastmasters International | 2018 - present**

Member of iNCRedible Toastmasters, NCR chapter of Toastmasters International

I use this organization to finetune my communication and leadership skills with public speaking practice

**Technology Student Association | 2013 - 2018**

Team leader for numerous projects over seven years, including:

- **PurH2O**, an effective, affordable, water disinfection device (placed 2<sup>nd</sup> in state and **3<sup>rd</sup> in nation**, 2017)

- **EnVision**, a cheap, portable OCR text scanner for the visually impaired (placed 1<sup>st</sup> in state & **4<sup>th</sup> in nation**, 2016)

## Leadership Activities

**Stamps Scholars National Convention | 2018 - present**

Assisting the organization of the Stamps National Convention as a part of the communications subcommittee;

my task involves designing, creating, and updating the website and mobile app for the convention

## Skills

**Programming in Java (CS1332)**

**Machine Learning Programming in Python and Scala (CS 2340, CS4641)**

**Programming in LaTeX**

**Computational programming in Mathematica, MATLAB, R**

**Experience designing with CAD 2D and 3D**

**Website Construction (HTML, CSS, Javascript, React, MongoDB, Express, Heroku)**

**Fluently read, write, and speak Persian**

**Experienced in 3D Printing, Laser Engraving, CNC Milling**

**Experience with circuit design and construction**

**Experience writing and presenting academic articles**