

Ali Mirzazadeh

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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 (11th 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 3rd at Georgia Tech's Annual Appathon Competition, 2018

Placed 1st 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

Objects and Design (CS2340) Final Project | 2019

Created a Scala based, full stack, CRUD web app that serves as a tourist guide for the attractions in Berlin, German and complete with comments, reviews, and administrator privileges.

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

Technology Student Association | 2013 - 2018

Team leader for numerous projects over seven years, including:

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

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

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

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