

# Andrew Huang

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## Education

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### Duke University

Durham, NC

B.S. in Computer Science, Mathematics

Fall 2022 – Present

- Cumulative GPA: 3.775, Major GPA: 3.85
- *Relevant coursework:* Discrete Mathematics, Calculus III, Linear Algebra, Functional programming, Multivariable Calculus, Linear Algebra

### William G. Enloe High School

Raleigh, NC

- Unweighted GPA: 4.0; Weighted GPA 4.78

2018-2022

## Employment

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### Student Researcher

Mazurowski Lab

Fall 2022 - Present

- Work on improving the current lab website by developing a cross platform software using dart/flutter to display 3D bone models to work on iOS and Android devices
- develop dart program to incorporate output from python project that performs automatic multi-class bone segmentation on pelvic MRI dataset using deep learning models
- utilize flutter\_cube framework to display .obj and .mtl files on application

### Barista

Boba Baba Tea Cafe

Spring - Fall 2022

- Led team for making boba, provided solutions for customer complaints and trained new employees
- Crafted Handmade drinks and cleaned facilities

### Programming Instructor

Raleigh Academy of Chinese Language

Fall - Spring 2021

- Instructed class of 10 students on MIT App Inventor 2 block coding
- Created projects including APIlocation sensors, and mobile games.

### Student Researcher

UNC Neural Engineering Lab

Summer - Fall 2021

- Ran 3-photon data through cNMF and eliminated non neuronal areas using python pandas
- Utilized pytorch CNN to classify neuronal positions and segmented data
- Improved existing algorithm to accept 3-photon data by using numpy to simulate 3-photon movies from 2-photon and cross-referenced motion correction results.

## Projects

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### Personal Website

Fall 2022

- Developed reactive personal website using HTML, CSS, and Javascript

## Skills and Interests

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**Languages:** Python; C++; Java; Scheme, go, HTML, CSS, Javascript, Flutter

**Technologies:** Visual Studio; Codeblocks; Eclipse, pycharm, git

**Areas of Interest:** Machine Learning; Imaging analysis; Software Development

**Competitive Programming algorithms:** Dynamic programming, LCA, String Hashing, Segment Trees, etc.

**Organizations:** Duke Chronicle, Duke Quantitative Finance Club, Duke University Math Union (DUMU), Enloe Science Olympiad

## Honors and Awards

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- **SIG Campus Poker Tournament 6th place** December 2022
- **Facebook Hacker Cup Round 2 Qualifier** September 2021/22
- **USA Computing Olympiad (USACO) Gold Division** May 2021
- **American Invitational Mathematics Exam (AIME) Qualifier** February 2022
- **US Earth Science Olympiad National Finalist (USES0), one of 20 Earth science National Finalists** March 2022
- **US Biology Olympiad Semifinalist Honorable Mention (USABO) US Top 125,** March 2022
- **Science Olympiad Nationals: 7th place team, Letter of Commendation by Congresswoman Deborah K. Ross** May 2022