# Zachary Baylin

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# Education

North Springs High School

7447 Roswell Rd

Sandy Springs, GA 30328

August 2015 - May 2019

College Preparatory Diploma Math & Science Magnet Seal

GPA: 101

Georgia Tech Dual Enrollment

North Ave NW Atlanta, GA 30332 August 2017 - May 2019

Math 1554 - Linear Algebra

Math 2551 - Multivariate Calculus

GPA: 4.0

#### Honors & Awards

FBLA National Leadership Competitor	2018 - Mobile App Development
National Honor Society	2018 & 2019
Principal's List (Honor Roll)	2016 - 19
AP Scholar w/ Distinction	2018
Georgia Certificate of Merit - top $5\%$ of class	2018
FBLA State Competitor	2018 - 4th, Mobile App Development
Model UN State Competitor	2018
Georgia Best Worker Certification	2018
National Latin Exam Gold Medal	2017 & 2018
AP Scholar w/ Honor	2017
National Merit Commended Student	2017

## Leadership -

# Young Americans for Liberty (North Springs)

# President (2018-19), Founder (2018)

- Founded club to increase the political diversity and advocate lesser-known positions among students at North Springs High School
- Communicate with the organization's regional office leaders for resources, events, and to help with the formation of other high school chapters
- Organize regular meetings to discuss political activism and debate ideology
- Plan campaign events to organize volunteers to canvas for candidates
- Grew from three to fifteen members in one year

## Future Business Leaders of America (North Springs)

Vice President/Treasurer (2018-19)

- Increased membership for the 2018-2019 school year
- Planned various fundraisers for the club itself and charities like March for Dimes
- Increased involvement in competitions

# **UNICEF** (North Springs)

## Vice President (2018-19)

- Increased membership for the 2018-2019 school year
- Organized fundraisers for the parent organization, such as Trick or Treat for UNICEF and a water-walk
- Managed the incoming funds and donation and reported them to the school and organization

Work Experience

# Rolltrax, Atlanta GA CTO and Lead Developer, Co-Founder

August 2017 - Present

- Founded the company alongside a fellow student and a Work Based Learning coordinator
- Developed the main web software component using Crystal and ReactJS
- Wrote the front end in Python using the Qt for Python GUI framework
- Managed all operations, ensuring all servers and backends are up and running
- Managed all email, data backup, and load-balancing on Google Cloud Platform

## Fulton County Schools, Atlanta GA Network Engineer

September 2017 - Present

- Managed county-wide networking infrastructure using tools such as SolarWinds and HP Aruba
- Managed Ethernet layours of schools with 1,000+ network points
- Managed WiFi access points and load balancing during high stress situations
- Wrote specialized software in Ruby
- Maintained sites with 2,000+ client and operated as a watchdog for multiple schools in the network

Extracurricular Activities -

#### Future Business Leaders of America

2018 & 2019

- Developed a library app used to manage books and other media for library specialists and patrons of a library
- Wrote a cross platfrom mobile app using the Flutter mobile framework
- Developed proprietary sorting algorithms for media

## Science Olympiad

2017 - 19

- Competed in events related to computer science and electrical design against other high school students
- Built a hovercraft for competition

#### **SpartanHacks**

2018 & 2019

- Taught students with a variety of knowledge concepts in computer science
- Helped organize the overnight Hackathon

## **National Honor Society**

2018 & 2019

• Tutored students in math and computer science

#### Model UN

2018

- Research and discuss political systems and current events
- Debate with other students and competed in Model UN conferences

## Consortium for Mathematics and Its Applications

2017 - 19

• Participated in a 36-hour international competition to find the optimal solution to a complex mathematical problem

## Ian's Friends Foundation

2016

• Performed as a drummer in a band that played at multiple fundraisers to entertain donors and encourage them to donate to pediatric brain tumor research

# Self-Directed Projects

## security-py

• Developed a Python program to pull data directly from the SEC

- Developed a 1 yellon program to pun data directly from the SEX
- Wrote algorithms to develop trend data for various securities

kiosk-rb 2018

- Developed a kiosk application during my time as a Network Engineer at Fulton County Schools
- The program helps collect information about a device with faulty hardware/software and direct it to the proper channels

2018

p5-snake 2018

• Implemented the classic game of snake in the Javascript graphics processing library p5.js

rofi-wifi-menu 2017

- Developed a tool to help Linux users join and manage their WiFi networks
- Garnered 50+ starts at the Github repo

Word Clock 2017

- Created a word clock using an Arduino and an array of programmable RGB LEDs
- Wrote the C code to dynamically generate a sentence conveying the time

Arcade Machine 2017

- Designed and constructed a custom arcade cabinet
- Wired a Raspberry Pi to arcade controllers and the cabinet's screen

# Interests and Skills -

- Interests: Programming, Engineering, Politics, Economics, Philosophy, Origami, Jazz, Drumming
- Programming Languages: Python, Ruby, Javascript, Java, C, OCaml, Crystal, Lua, SQL
- Frameworks: Sinatra, Kemal, Flutter, ReactJS, ReasonML, Ruby on Rails, Pandas
- Tools: VSCode, ServiceDesk, Excel VBA