

# Alan Ding

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## EDUCATION

### Princeton University

B.S.E. IN COMPUTER SCIENCE

Sep 2018 - May 2021 (expected)

Princeton, NJ

Dean's List • GPA: 4.0 / 4.0

### Dublin Coffman High School

Aug 2014 - May 2018 • Dublin, OH

Summa Cum Laude

GPA: 4.7 weighted, 4.0 / 4.0 unweighted

### Carnegie Mellon University

AP/EA PRE-COLLEGE PROGRAM

Jul 2017 - Aug 2017 • Pittsburgh, PA

## COURSEWORK

### Undergraduate

Algorithms and Data Structures	A
Intro to Programming Systems	A
Advanced Vector Calculus	A
Advanced Lin. Alg. with Applications	A

### High School

AP Computer Science	5
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### Pre-College

Principles of Imperative Computation	A
Concepts of Mathematics	A

## SKILLS

### Programming Languages

Java • C • Scala • Python • MATLAB  
x86-64 Assembly • L<sup>A</sup>T<sub>E</sub>X

### Technologies

Git • Apache Spark • Jenkins • Hadoop  
Maven • Docker • Jupyter Notebook

### Human Languages

English • Chinese • Latin

## INTERESTS

- Long-distance running and data-driven training
- Composing, playing, and listening to classical and jazz music
- Speed-solving Rubik's Cubes and other twisty puzzles

## EXTRACURRICULARS

Princeton Running Club (webmaster position)  
Princeton Univ. Wind Ensemble  
Princeton ACM • Math Club

## WORKING EXPERIENCE

### CAS TECHNOLOGY INTERN

Jun 2019 - Aug 2019 | Columbus, OH

- Worked with a team of three other interns under Agile project management on a big data analytics platform built from scratch. It supports complex ad-hoc data dives which can capture numerous dimensions of how CAS's customers are using CAS's products
- Use of Scala, Apache Spark enables the platform to scale seamlessly
- The highly anticipated platform would give top-level leadership and emerging data analytics teams at CAS fresh insights on how to better tailor products to their customers' needs

### Sycamore Growth Group, LLC TECHNICAL WRITER

Apr 2018 - Aug 2018 | Dublin, OH

- Performed technical writing of over 100 project summaries for two client companies in manufacturing and software
- Performed financial modeling and prepared tax credit reports for a client using Excel and L<sup>A</sup>T<sub>E</sub>X to demonstrate the potential of claiming a couple million dollars in research and development tax credits
- Partook in meetings with client company representatives to identify points of research and development in their operations

## VOLUNTEERING EXPERIENCE

### Columbus Center of Science and Industry (COSI)

FLOOR FACULTY FACILITATOR

Nov 2016 - Mar 2018 | Columbus, OH

- Shared my passion for science to thousands of museum goers through giving various science demonstrations
- Guided guests through activities and interactive exhibits
- Assisted guests with questions about the museum's offerings, directions, recommendations, among other inquiries

## PROJECTS

### TrainingTracker (PYTHON)

A Jupyter Notebook that allows me to fetch and extensively analyze my running data from Strava. It can estimate acute and chronic training load as well as provide plots showing different performance metrics. The data fed into these plots can be filtered by traits such as sleep quality and motivation to run which the user provides daily to a questionnaire.

## AWARDS

- USA Physics Olympiad Silver Medalist 2018
- American Invitational Math Examination (AIME)  
Best score: 9 2015, 2017 - 2018
- American Mathematics Competition (AMC) Distinguished Honor Roll 2017
- National Finalist for the US National Chemistry Olympiad 2015
- National Merit Finalist 2018
- AP National Scholar 2017 - 2018