

David Du

168 Everdell Ave, Hillsdale NJ 07642

201-675-3430

davdu21@bergen.org

david-du.com

Objective

To obtain an educational internship in the field of Computer Science in the fulfilment of Senior Experience for the academic year of 2020-2021

Education

Academy for Technology and Computer Science (ATCS)

2017 - Current

Bergen County Academies (BCA) Hackensack, NJ

2017 - Current

GPA 3.984

Work Experience

Huaxia Chinese School Paramus, NJ

2019 - Current

- Taught competition math to middle schoolers
-

ACE Education Center Hackensack, NJ

2019

- Helped high schoolers master SAT Math concepts

Related Courses

Data Structures — 2020

Studied time and space complexity of algorithms and algorithmic complexity of Turing Machines, uncomputability, and the Halting Problem through the use of C++.

Mathematical Foundations of Computer Science — 2020

Formalised the notions of algorithms through mathematics, including proving the validity of algorithms and formal logic

Functional Programming— 2020

Programmed in Scheme to understand the basics of functional programming and lambda calculus.

Analytical Calculus— 2020

Formulated the fundamentals of calculus through proof and rigor and began solving differential equations

AP Computer Science — 2019

Studied the development of data structures through logic and formal methods while studying the AP Computer Science Curriculum through the use of Java.

Artificial Intelligence — 2019

Utilised Python in order to study the basics of artificial intelligence, including heuristic searching and minimax algorithms.

Computer Skills

Programming Languages

- C++, Java Python, Scheme

Markup Languages

- HTML, CSS, \LaTeX

Graphics

- Adobe Photoshop

Community Service

Joe Holbrook Math Competition

Volunteer Leader

2019 - Current

Bergen Chinese School

Teacher Assistant

2018

Bergen County Academies Open House

Volunteer

2018-Current

Honors & Awards

- USACO Silver
- AIME Qualifier
- Bronze at the World Math Team Championship (WMTCC)
- Canadian Open Mathematics Challenge: Performance with Distinction
- National AP Scholar
- High Honors: John Hopkins International Talent Search
- Completed ABRSM Series of Exams

Extracurricular Activities

- President: Science Olympiad
- Junior Captain: Physics Team
- Vice President: Key Club
- Member: Math Team
- Member: Nation Honor Society
- Member: National Chinese Honor Society
- Attendant: Columbia Science Honors Program

Foreign Languages

- Chinese — Fluent