



Davidson Fellow Alexander Power

(\$10,000 Scholarship Recipient)



Personal Info

Alexander Power

Age: 15

Cedar Falls, Iowa

School, College and Career Plans

Alexander graduated from Cedar Falls High School in the Class of 2002. He will attend Iowa State University this fall and plans to earn advanced degrees to develop a career in research.

Davidson Fellows Submission (*Mathematics*)

In his project, *On Chromatic Polynomials and the Properties of their Chromatic Growth Ratios*, Alexander explored advanced theories and problems in graph theory, specifically in chromatic growth ratios and chromatic polynomials. Significant applications of Alexander's results include future mathematics and graph theory research, communication networks, robotic vision systems and the expansion of the Internet.

Biography

Since 1997, Alexander has been taking college-level courses at the University of Northern Iowa in addition to his high school classes.

A National Merit Scholar, Alexander is also an AP Scholar and was a semi-finalist in both the Intel and Siemens-Westinghouse science competitions.

Alexander led his Science Bowl team to the Department of Energy National Science bowl and was on the Iowa American Regions Math League team.

Alexander served as president of his high school Math Club for two years and ran cross-country for the past four years. He can read, write and speak Mandarin Chinese and French at an intermediate level. Alexander worked in the light crew for the school theater department and also played in the orchestra.

In his spare time, Alexander is a coin collector, cellist and golfer.

Please see next page.

The Davidson Institute for Talent Development

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Honors/Awards

- 2002 Davidson Fellow (September)
- 2002 Advanced Placement Scholar
- 2002 American Regions Math League (ARML), Individual High Scorer
- 2002 Des Moines Register Iowa All-Academic Team
- 2002 Intel Science Talent Search, Semi-finalist
- 2002 National Merit Scholar
- 2002 State of Iowa Scholar
- 2002, 2001 American Mathematics Competition (AMC-12), First Place for the State of Iowa
- 2001 Siemens Westinghouse Science and Technology Competition, Semi-finalist
- 2001 U.S.A. Math Talent Search, Grand Prize Winner
- 2001, 2000 U.S. Chemistry Olympiad

Community Activities

Alexander participates in his synagogue's youth group.

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