



Davidson Fellow Louis Malcolm Hutson, III

(\$10,000 Scholarship Recipient)



Personal Info

Louis Malcolm Hutson, III
(prefers Malcolm)

Age: 17
Mandeville, Louisiana

School, College and Career Plans

Malcolm will begin his senior year at Mandeville High School in the fall. He plans to attend college to work toward a double major in computer science and computer engineering with a minor in music.

Davidson Fellows Submission (*Technology*)

Malcolm's project, *Hashing Algorithms: An Evolutionary Approach*, is a computer application that uses evolutionary logic and techniques to "evolve" the framework of a computer database. Using processes modeled after those found in nature, the computer systematically manipulates algorithms (functions) within the database that determine how data will be stored and accessed. By testing the algorithms against one another and evolving new "child" algorithms from successful "parent" ones, his program can engineer databases that are specifically tuned for each database's individual purpose, improving speed and accuracy. Malcolm's work has practical database applications in the business world.

Biography

Malcolm's fascination with heat and electricity began as a toddler. As his interest in physics and electronics grew, he began learning how to repair small appliances and accumulating old parts to create new inventions.

At age 8, Malcolm designed an invention to reduce air pollution. His understanding of machines, coupled with his interest in logic and problem solving, makes Malcolm a natural for computer programming.

When not computing, Malcolm is often involved in music. He plays five instruments and actively participates in school band as well as other groups in the community.

Malcolm maintains a 3.9 grade point average in a challenging program of gifted, honors and AP classes, while continuing his extracurricular and community activities.

Please see next page.

The Davidson Institute for Talent Development

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(Cont.)

Honors/Awards

- 2002 Davidson Fellow (September)
- 2002 District Literary Rally, Third Place in Advanced Math
- 2002 Regional Science Fair, Second Place
- 2002, 2001 Naval Science Award from the Office of Naval Research
- 2001, 2000 Selected for the Oceans Alive program (Oceanographic Career Enhancement and Naval Science: Adventurous Learning in Variable Environments)
- 2001 Louisiana Science and Engineering Fair, Third Place Physics
- 2001, 2000, 1999, 1998 Regional Science Fair, First Place
- 2000, 1999 Louisiana Science and Engineering Fair, Second Place Physics
- 1998 Louisiana Science and Engineering Fair, First Place Physics

Community Activities

A sound and lighting technician for church services and events, Malcolm is an active member of the youth group, choir and an acoustic guitarist in the Youth Praise Band. Malcolm redesigned the local elementary school's web site and completed custom computer programming for high school teachers to incorporate in their classrooms. He provided free math tutoring through the Math Club and volunteered through the National Honor Society.

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