



Davidson Fellow
Tim Lyakhovetskiy
(\$10,000 Scholarship Recipient)



Personal Info

Tim Lyakhovetskiy
Age: 17
Palo Alto, Calif.

School, College and Career Plans

Tim graduated from Palo Alto High School in the Class of 2003. He will attend the University of California at Santa Barbara this fall where he will study computer science. After college, Tim plans to work in the computer graphics industry in rendering or real-time simulation.

Davidson Fellows Submission (*Technology*)

Tim Lyakhovetskiy developed a flexible, object-oriented C++ application programming interface (API) to allow for the rapid development of multimedia applications. In his project titled "Stem Engine," Tim created a framework that significantly reduces development time and costs for applications used in scientific research, education, entertainment and other computer simulations.

Biography

Tim attended pre-school and 1st grade in Moscow, Russia before moving to America with his family when he was seven years old. After moving to the United States, Tim attended several San Francisco public and private schools and graduated this year from Palo Alto High School.

In addition to developing Stem Engine, Tim wrote some of the first demonstrations of OpenGL in Visual Basic. He also devised a multi-player, three-dimensional Windows game called "Pong on Steroids" and ported a simulation of the behavior of super-fluid helium from DOS to SpleefEngine. He worked on SharkOS, a simple multi-threaded operating system, and wrote a chapter for *Game Programming How To's* published by Magma Interactive, LLC.

When he takes a break from computer programming, Tim enjoys playing the banjo and guitar, and making short films. Tim is fluent in Russian and English, as well as several programming languages.

Please see next page.



Davidson Fellow
Tim Lyakhovetskiy
(Cont.)

Honors/Awards

- 2003 Davidson Fellow
- 2003, 2002, 2001 California Governor's Scholarship Award Recipient
- 2002 Rachel H. Austin Award for Video Production
- 2001 Palo Alto High School Award for Excellence in Computer Science
- 2001 Advanced Placement Exam for Computer Science – Score of 5
- 2000 Brainbench Master Certification in 3D Studio Max
- 2000 Brainbench Certification in C Programming
- 2000 Brainbench Certification in Visual Basic Programming

Community Activities

Tim applied his programming skills as a developer for Stanford's Exceptional Program for Gifted Youth (EPGY), providing e-learning courses for gifted and talented students, in mathematics, english, physics, computer science and music.

###