

# CWSF 2007 - Truro, Nova Scotia



## David Williams-King

### Developing Codeform: A Syntax Highlighter

**Division:** Earth & Environmental Sciences / None

**Category:** Senior

**Region:** Calgary Youth

**City:** Bragg Creek, AB

**School:**

**Abstract:** This project created, published, and evaluated codeform, a syntax highlighter. Written in C, codeform has many features including no memory leaks. Codeform has unique clipboard extensions and an online version. Users of codeform have provided feedback, and codeform is even being integrated into a forum. The evaluation tests showed that codeform is more syntactically correct, efficient, and flexible (though less mature) than other syntax highlighters.

#### Biography

I am always programming computers; I enjoy astronomical topics; and I read voraciously. I am the unofficial leader of a local computer programming club. I also attend meetings of the Royal Astronomical Society of Canada's Youth Group, and a math/logic group at the University of Calgary. I have written the Waterloo Canadian Computing Competition twice and made the honour roll each time. I have taken two third-level computer programming courses at Athabasca University, COMP307 (C and C++) and COMP308 (Java), achieving an A+ for each. I have entered the Calgary Youth Science Fair twice; both times I won a gold medal and this time I also won the Alberta Research Council Award. I maintain my own website at <http://dwks.theprogrammingsite.com/> and I help manage the other sections of the same website. I also very frequently post on a major programming message board, CBoard (<http://cboard.cprogramming.com/>), where I am eleventh in number of posts and recently ran for moderatorship. I have played the violin for seven years. I also enjoy sports, and currently participate in badminton and soccer. In the winter I frequently go downhill skiing, and skate and play hockey on our lake.

#### Awards

#### Value

The University of Western Ontario Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: University of Western Ontario	\$1 000
Bronze Medal - Computing & Information Technology - Senior Sponsor: Intel of Canada, Ltd.	\$300
Total	\$1 300