



The CENTRE for EDUCATION
in MATHEMATICS and COMPUTING

*2006
Canadian
Computing
Competition
Results*



This year marked by third year as Director of the Canadian Computing Competition, and I think the CCC is moving in a positive direction.

The most major development is that there is an on-line grading system under development, and this system will hopefully be deployed in time for the 2007 Stage 1 contest. More information will be available on the main CCC website (<http://www.cemc.uwaterloo.ca/ccc>) in early Fall 2006.

This year marked the second year of the joint collaboration with the University of Hong Kong to offer the contest to Hong Kong high school students. These competitors are not listed here (since we are listing only the Canadian Competitors). More information (including results) can be found at: <http://www.cs.hku.hk/ccc2006/>.

A detailed summary of problems (with solutions and descriptions of solutions) will be posted on the CCC website by the end of May 2005. Below, a qualitative summary of both the Junior and Senior contest is presented.

The Junior contest seemed to provide a reasonable distribution of scores, and most students who attempted it did well on the first question. Questions 2 and 3 on the contest provided a nice increase in difficulty, and the last two problems provided a lot more challenge. Perhaps the fourth problem was more difficult than the “ideal” problem, but overall, this contest provided a nice problem set.

On the Senior problems, the first two problems were generally well done, and the last two were meant to be separator questions. The third problem seemed to be more difficult than we intended, but overall, the range of scores was quite good. The fourth problem seemed more difficult for students than was expected, since the solution is just an iteration through all possibilities, ensuring all properties are satisfied.

I hope you found the contest this year interesting and educational, fun and intriguing. Thanks for being a part of it.

Troy Vasiga
Director of the Canadian Computing Competition
May 2006

Junior Competitors

Students are listed in alphabetical order within each group.

Dans chaque group, les élèves sont nommés en ordre alphabétiques.

Name/Nom	School/École	Location/Endroit
Group 1: Scores from 61 to 75		
Komarnitsky Carolyn	Centennial C. & V.I.	Guelph, ON
Lam Daniel	Univ. Of Toronto Schools	Toronto, ON
Plachta Jacob	Woburn Collegiate Institute	Toronto, ON
Sichin Octavian	Forest Hill C.I.	Toronto, ON
Tupaz Aaron	Father Michael Goetz S.S.	Mississauga, ON
Wong Chris	Markham D.H.S.	Markham, ON
Yao Vick	Vincent Massey S.S.	Windsor, ON
Zhao Eric	Vincent Massey S.S.	Windsor, ON
Group 2: Scores from 53 to 60		
Arcscott Jordan	Lester B. Pearson C.H.S.	Gloucester, ON
Chong Raymond	Guelph C. & V.I.	Guelph, ON
Feng Victor	A.Y. Jackson S.S.	North York, ON
Fu William	A.Y. Jackson S.S.	North York, ON
Guo Alan	O'Neill C.V.I.	Oshawa, ON
Harrison Train Matthew	Marc Garneau C.I.	Don Mills, ON
Ing Colman	Woburn Collegiate Institute	Toronto, ON
Kim Jeeyoung	Resurrection C.S.S.	Kitchener, ON
Komer Brent	St. Thomas Aquinas S.S.	London, ON
Lindsay Martin	Dunbarton H.S.	Pickering, ON
Mohamedali Hassan	Richmond Hill H.S.	Richmond Hill, ON
Ramani Sasha	Gordon Graydon Memorial S.S.	Mississauga, ON
Su Fangzhou	Woburn Collegiate Institute	Toronto, ON
Teng David	Woburn Collegiate Institute	Toronto, ON
Zhu Tian	Forest Hill C.I.	Toronto, ON
Group 3: Scores from 49 to 52		
Anderson Matthew	Frontenac S.S.	Kingston, ON
Ban Frank	Vincent Massey S.S.	Windsor, ON
Calmusky Sean	Aurora High School	Aurora, ON
Chen Difei	Marc Garneau C.I.	Don Mills, ON
Chmielnik Jakub	All Saints Cath. S.S.	Whitby, ON
Choi Jonathan	St. George's School	Vancouver, BC
Greenlay Scott	Ancaster H.S.	Ancaster, ON
Howard Devin	St. John's Kilmarnock School	Breslau, ON
Kim Ryan	Holy Trinity Cath. S.S.	Courtice, ON
Liao Jason	Thornlea S.S.	Thornhill, ON
Mack David	Immaculata H.S.	Kelowna, BC
Nikkel Daniel	Ridley College	St. Catharines, ON
Pugh Robin	Dunbarton H.S.	Pickering, ON
Simpson Kevin	Western Canada H.S.	Calgary, AB
Steeves Kelsey	Pine Ridge S.S.	Pickering, ON
Tran David	Riverdale C.I.	Toronto, ON

Canadian Student Honour Roll**Palmarès des éves à l'échelle nationale**

Name/Nom		School/École	Location/Endroit
Van Boxtel	Joshua	Newmarket H.S.	Newmarket, ON
Wah	Whitney	Markham D.H.S.	Markham, ON
Yaeger	Ben	Barrie North C.I.	Barrie, ON
Yan	Hao	Jarvis C.I.	Toronto, ON
Yang	Steven	Gloucester H.S.	Gloucester, ON
Yuan	Kevin	Markville S.S.	Markham, ON
Zhu	Anthony	Marc Garneau C.I.	Don Mills, ON
Group 4: Scores from 46 to 48			
Alexandroff	Rachael	St. Clement's School	Toronto, ON
Beer	Aaron	Academy For Gifted Children -	Richmond Hill, ON
Canning	Jared	Ancaster H.S.	Ancaster, ON
Chiu	Sammy	Riverdale C.I.	Toronto, ON
Desembrana	Drew	St. Ignatius Of Loyola H.S.	Oakville, ON
Doty	Erik	Sir Robert Borden H.S.	Nepean, ON
Fu	Helen	Victoria Park S.S.	North York, ON
Huang	Chen	Woburn Collegiate Institute	Toronto, ON
Jasudavicius	Luke	St. Catharines C.I. & V.S.	St. Catharines, ON
Jiang	Jiayang	A.Y. Jackson S.S.	North York, ON
Karim	Amr Ali	E.S. Georges-P. Vanier	Hamilton, ON
La	Garon	Riverdale C.I.	Toronto, ON
Lam	Kelvin	Gordon Graydon Memorial S.S.	Mississauga, ON
Lee	JooHoo	Vaughan S.S.	Thornhill, ON
Lin	Qiang	Riverdale C.I.	Toronto, ON
Lu	Yibo	Bayview Secondary School	Richmond Hill, ON
Qiao	Xiao	Vincent Massey S.S.	Windsor, ON
Robson	Daniel	Centennial C. & V.I.	Guelph, ON
Rosen	Josh	Westmount C.I.	Thornhill, ON
Sagar	Vinay	Sir John A. Macdonald S.S.	Waterloo, ON
Servos	James	Waterloo Oxford D.S.S.	Baden, ON
Siedlaczek	Thomas	Seaquam S.S.	North Delta, BC
Song	Andrew	Westmount S.S.	Hamilton, ON
Tarba	Lily	Jarvis C.I.	Toronto, ON
Wong	Wesley	Marshall McLuhan Cath. S.S.	Toronto, ON
Wu	Chris	Richmond Hill H.S.	Richmond Hill, ON
Zahos	Zadh	Earl Haig S.S.	North York, ON
Zhao	Marina	Vincent Massey S.S.	Windsor, ON

Senior Competitors

Students are listed in alphabetical order within each group.

Dans chaque group, les élèves sont nommés en ordre alphabétiques.

Name/Nom	School/École	Location/Endroit
Invitees to Stage 2 of the 2006 Canadian Computing Competition		
Attali	Dean	Thornlea S.S.
Braverman	Boris	Sir Winston Churchill H.S.
Chartier	Mathieu	Homeschool
Fine	Eli	St. George's School
Goh	Jonathan	St. George's School
Gorrie	Cameron	Hillfield-Strathallan College
Guruganesh	Guru	Woburn Collegiate Institute
Jackson	Jason	Aurora High School
Keet	Adrian	Westmount Charter School
Kong	Andy	Vincent Massey S.S.
Liang	Chenen	Waterloo C.I.
Ma	William	Waterloo C.I.
Meng	Ying	Woburn Collegiate Institute
Ngan	Ricky	Thornhill S.S.
Pai	Chingyen	St. George's School
Peng	Richard	Vaughan Road Academy
Schaeffer	Luke	Centennial C. & V.I.
Shi	Peng	Sir John A. Macdonald C.I.
Sun	Ming	Hon W.C. Kennedy C.I.
Zhang	Stephen	Jarvis C.I.
Zhu	Qiyu	A.Y. Jackson S.S.
Honourable Mention		
Bajenov	Andrei	Avondale Alternative S.S.
Ben David	Shalev	Waterloo C.I.
Chan	Kevin	Milliken Mills H.S.
Chan	William	Unionville H.S.
Collins	Joseph	Huron Park S.S.
Fan	Ni	Sir Robert Borden H.S.
Girard	Benoit	Pere Rene De Galinee
Gryciuk	Patrick	Philip Pocock C.S.S.
Ho	Derek	Woburn Collegiate Institute
Huang	Bill	A.Y. Jackson S.S.
Kam	Preston	Pierre Elliott Trudeau H.S.
Kotwicz	Peter	Kelowna S.S.
Kok	Arthur	Thornlea S.S.
Li	Gary	Pierre Elliott Trudeau H.S.
Liu	Ray	Riverdale C.I.
Lopyrev	Konstantin	Richmond Hill H.S.
Makarov	Serhei	Univ. Of Toronto Schools
Neudoerffer	Tom	Sir John A. Macdonald S.S.
Nica	Mihai	Waterloo C.I.
Park	Paul	St. Catharines C.I. & V.S.
Petrescu	Adrian	Vincent Massey S.S.

Canadian Student Honour Roll**Palmarès des élèves à l'échelle nationale**

Name/Nom		School/École	Location/Endroit
Raveendran	Gobi	Milliken Mills H.S.	Unionville, ON
Ravichandiran	Nisanthini	Woburn Collegiate Institute	Toronto, ON
Sandercott	Robert	Woburn Collegiate Institute	Toronto, ON
Segel-Brown	Asher	Earl Of March S.S.	Kanata, ON
Sharp	Chris	Woburn Collegiate Institute	Toronto, ON
Sharp	Graham	A.N. Myer S.S.	Niagara Falls, ON
Siu	Kevin	Richmond Hill H.S.	Richmond Hill, ON
Tang	Thomas	A.Y. Jackson S.S.	North York, ON
Tao	James	Burnaby North S.S.	Burnaby, BC
Tarasyuk	Valery	Thornlea S.S.	Thornhill, ON
Truong	Jack	William Lyon Mackenzie C.I.	Toronto, ON
Tsai	Nikky	St. George's School	Vancouver, BC
Wang	Stephen	A.Y. Jackson S.S.	North York, ON
Williams King	David	Homeschool	Calgary, AB
Wu	Lei	Vincent Massey S.S.	Windsor, ON
Wu	Zhiyuan	Vincent Massey S.S.	Windsor, ON

Group 3: Scores from 35 to 40

Angold	Jordan	Sir John A. Macdonald S.S.	Waterloo, ON
Ballard	Rob	St. George's School	Vancouver, BC
Barr	John	Holy Trinity Cath. S.S.	Courtice, ON
Boone	Peter	Kitchener-Waterloo C.I. & V.I.	Kitchener, ON
Cham	Jason	Dunbarton H.S.	Pickering, ON
Chen	James	St. George's School	Vancouver, BC
Chiarelli	Anthony	St. Thomas More CATH.S.S	Hamilton, ON
Deng	Bo Hong	Jarvis C.I.	Toronto, ON
Gordon	Lauren	Academy For Gifted Children -	Richmond Hill, ON
Hao	Yanqi	Centennial C. & V.I.	Guelph, ON
Hong	Rich	St. George's School	Vancouver, BC
Jiang	Allan	Oakville Trafalgar H.S.	Oakville, ON
Khismatulina	Valeriya	Victoria Park S.S.	North York, ON
Kim	Seulki	T.L. Kennedy S.S.	Mississauga, ON
Komer	Will	St. Thomas Aquinas S.S.	London, ON
Lang	Alexandr	Champlain Regional College	St. Lambert, QC
Liao	Sunray	Sir Robert Borden H.S.	Nepean, ON
Lordello	Nicholas	Lycee Paul Claudel	Ottawa, ON
Ma	Jethro	Unionville H.S.	Unionville, ON
Mandke	Tejas	Martingrove C.I.	Etobicoke, ON
Manishirov	Ben	Vaughan S.S.	Thornhill, ON
Mcdonald	Daniel	Lisgar C.I.	Ottawa, ON
Nosal	Conor	Ancaster H.S.	Ancaster, ON
Ohara	Allen	Oakridge S.S.	London, ON
Omer	Kaab	Richmond Hill H.S.	Richmond Hill, ON
Robert	Malcolm	All Saints Cath. H.S.	Kanata, ON
Smith	Adam	Richmond Hill H.S.	Richmond Hill, ON
Snelgrove	Xavier	Ursula Franklin Academy	Toronto, ON
Tsui	Edmund	Woburn Collegiate Institute	Toronto, ON
Wareham	Amber	Resurrection C.S.S.	Kitchener, ON
Wice	Alex	Leaside H.S.	East York, ON
Wong	Heymian	Woburn Collegiate Institute	Toronto, ON

Canadian Student Honour Roll**Palmarès des élèves à l'échelle nationale**

Name/Nom		School/École	Location/Endroit
Woo	Roger	Woburn Collegiate Institute	Toronto, ON
Xu	Simon	Victoria Park S.S.	North York, ON
Yan	Bo	Lisgar C.I.	Ottawa, ON
Zaharia	Andrei	Jarvis C.I.	Toronto, ON
Zhang	Lisa	William Lyon Mackenzie C.I.	Toronto, ON
Zhang	Rachel	Thornlea S.S.	Thornhill, ON
Zhgu	Ryan	Adam Scott C. & V.I.	Peterborough, ON
Group 4: Scores from 31 to 34			
Blacher	Zak	Vincent Massey S.S.	Windsor, ON
Charlesworth	Ian	Frontenac S.S.	Kingston, ON
Chau	William	William Lyon Mackenzie C.I.	Toronto, ON
Chiang	Albert	St. George's School	Vancouver, BC
Debruyn	Jacob	Walkerville C.I.	Windsor, ON
Demsynjones	Richard	West Elgin S.S.	West Lorne, ON
Gist	Chris	Richmond Hill H.S.	Richmond Hill, ON
Harris	Michael	Sinclair S.S.	Whitby, ON
Henshall	Dane	St. George's School	Vancouver, BC
Hua	York	Riverdale C.I.	Toronto, ON
Khatri	Mayur	William Lyon Mackenzie C.I.	Toronto, ON
Kim	Eric	St. Michael's College School	Toronto, ON
Kim	Veronica	Westmount C.I.	Thornhill, ON
Kim	Yubin	Richview C.I.	Etobicoke, ON
Liu	Nicholas	St. George's School	Vancouver, BC
Maynard	Brett	Sinclair S.S.	Whitby, ON
Mcdonald	Tom	Walkerville C.I.	Windsor, ON
Moore	Andrew	Champlain Regional College	St. Lambert, QC
Ng	Keith	St. Francis Xavier Secondary	Mississauga, ON
Osborne	Nicholas	Kingston C.V.I.	Kingston, ON
Rostamianfar	Asha	Thornhill S.S.	Thornhill, ON
Rust Smith	David	Lisgar C.I.	Ottawa, ON
Rutledge	Brandon	Aurora High School	Aurora, ON
Seto	Jerry	Riverdale C.I.	Toronto, ON
Sono	Yoshiaki	St. George's School	Vancouver, BC
Stefan	Ramonat	Lisgar C.I.	Ottawa, ON
Thiagarajah	Saadanan	Waterloo C.I.	Waterloo, ON
Thurn	Derek	Sir Winston Churchill H.S.	Calgary, AB
Valentin	Jordan	Richview C.I.	Etobicoke, ON
Wan	Michael	Univ. Of Toronto Schools	Toronto, ON
Wehner	Erik	Waterdown D.H.S.	Waterdown, ON
Wong	Brendan	Richmond Hill H.S.	Richmond Hill, ON
Wue	Steven	Westmount S.S.	Hamilton, ON
Yamana	Sean	Vincent Massey S.S.	Windsor, ON
Young	Justin	Woburn Collegiate Institute	Toronto, ON
Zargham	Amir	Thornlea S.S.	Thornhill, ON
Zhang	Yaoyuan	Waterloo C.I.	Waterloo, ON

Problem Averages**Moyenne par problèmes**

Problem	All Contestants	Non-Zero Scores	Problem	All Contestants	Non-Zero Scores
Junior 1	13.28	13.77	Senior 1	10.54	13.14
Junior 2	11.30	13.00	Senior 2	8.73	11.53
Junior 3	6.50	11.22	Senior 3	1.37	8.05
Junior 4	0.68	5.37	Senior 4	1.47	8.51
Junior 5	0.41	4.50	Senior 5	0.45	4.21

The averages denoted as “All Contestants” in the above table indicate all students in the division.

The averages denoted as “Non-Zero” scores in the above table include only students in the division who received a non-zero score on the problem.

There were 617 Senior contestants and 751 Junior contestants.

Student Rankings**Classement des élèves**

<i>Junior Competitors</i>						<i>Senior Competitors</i>					
Score/ Note	Rank/ Position	Score/ Note	Rank/ Position	Score/ Note	Rank/ Position	Score/ Note	Rank/ Position	Score/ Note	Rank/ Position	Score/ Note	Rank/ Position
75	1	45	75	27	500	73	1	43	42	25	295
69	4	44	177	26	541	72	2	42	47	24	330
66	5	43	194	25	545	71	4	41	54	23	338
64	6	42	204	24	559	67	5	40	58	22	347
61	7	41	238	23	576	60	6	39	69	21	376
60	9	40	252	22	582	58	8	38	73	20	384
58	14	39	263	21	592	57	9	37	82	19	389
56	16	38	272	20	606	55	10	36	84	18	392
55	17	37	285	19	615	53	11	35	89	17	406
54	18	36	300	18	619	52	13	34	97	16	409
53	19	35	310	17	634	51	15	33	102	15	412
52	24	34	333	16	645	50	16	32	119	14	456
51	26	33	345	15	647	49	18	31	127	13	457
50	31	32	359	14	698	48	21	30	134	12	470
49	37	31	378	13	699	47	22	29	181	11	491
48	47	30	391	12	700	46	24	28	183	10	497
47	60	29	479	11	706	45	28	27	188		

2006 Canadian Computing Competition Committee

Rich Clausi Elmira District Secondary School Elmira, Ontario	Prof. Tony Cox School of Computer Science Dalhousie University, Halifax, NS	Prof. Ian Munro School of Computer Science University of Waterloo
Donny Cheung Graduate Student University of Waterloo	Sandy Graham Office of the Dean – Math University of Waterloo	Roy Parteno St. Marguerite d’Youville S.S Brampton, ON
Gordon Chiu Undergraduate Student University of Waterloo	Graeme Kemkes Graduate Student University of Waterloo	Troy Vasiga (Director) School of Computer Science University of Waterloo
Prof. Gord Cormack School of Computer Science University of Waterloo	Prof. Vlado Keselj School of Computer Science Dalhousie University, Halifax, NS	