

The CENTRE for EDUCATION in MATHEMATICS and COMPUTING

2009 Canadian Computing Competition Results



This year marked the third year of the joint collaboration with Tsinghua University in Beijing to offer the contest to Beijing 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://ccc.cs.tsinghua.edu.cn/. It was also the fifth consecutive year of the successful collaboration with the University of Hong Kong to offer the contest to Hong Kong high school students. This year, the Hong Kong students wrote a different competition than the Canadian CCC: this contest was created collaboratively between HKU and UW. More information (including results) can be found at: http://www.cs.hku.hk/ccc2009/.

A detailed summary of problems (with solutions) will be posted on the CCC website by the end of mid-May 2009. Below, a qualitative summary of both the Junior and Senior contest is presented.

The Junior contest seemed to fairly reasonable in terms of difficulty, with most students getting the first three questions. J4 and/or J5 was a bit too difficult, or long, for most students.

On the Senior problems, it was difficult. Quite difficult, starting at about S2. We will try to less the damage next year.

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 March 30, 2009

Junior Competitors

Students are listed in alphabetical order within each group. Dans chaque group, les élèves sont nommés en ordre alphabetiques.

Name/Nom

School/École

Location/Endroit

Quebec, QC

Group 1: Scores from	65 to 75
Daigle	Alexandre
Delanghe	Yuri
Jiang	Heinrich
Li	Yingxiang
Lin	Rui
Siao	Vincent
Simmonds	Joshua
Wu	Aleck
Yin	Fan
Yu	Kevin
Zheng	Tiger Ziyu

Group 2: Scores from 60 to 64

Choi	Jeffrey
Gershunovsky	Michael
Gilhuly	Sean
Ibanez	Daniel
Kleinschroth	Justin
Law	Dickson
Mack	Richard
Peng	Tianyi
Shu	Calvin
Wang	Clinton
Wong	Andrew
Xia	Steven
Yang	Annie
Zhao	Pei Jun

Group 3: Scores from 55 to 59

Bansal	Vinay Ak
Baxter	Thomas
Benjamin	Colin
Bohlooli	Ali
Cooper	Chris
Curelea	Andrei
Ditommaso	Michael
Fernandez	Francival
Glenesk	Julian
Gordiyenko	Taras
Guo	Robert
Hemmati	Soroosh
Hung	Victor

Cegep Ste. Foy Harry Ainlay H.S. Vincent Massey S.S. Ancaster H.S. William Lyon Mackenzie C.I. St. George's School The Country Day School A.Y. Jackson S.S. Vincent Massey S.S. Don Mills C.I. Vincent Massey S.S.

St. George's School Stephen Lewis S.S. St. David C.S.S. Martingrove C.I. Trinity College School Markham D.H.S. Immaculata Reg. H.S. St. Augustine S.S. Trinity College School University of Toronto Schools University of Toronto Schools Victoria Park C.I. Vincent Massey S.S. London Central S.S.

Sir Robert Borden H.S. Hillfield-Strathallan Coll. H.S. The Country Day School Young Mathematican Association Lisgar C.I. Vincent Massey S.S. St. Basil-The-Great-College School St. Joan of Arc C.S.S Leaside H.S. Ursula Franklin Academy University of Toronto Schools Young Mathematican Association St. George's School

Edmonton, AB
Windsor, ON
Ancaster, ON
North York, ON
Vancouver, BC
King City, ON
North York, ON
Windsor, ON
North York, ON
Windsor, ON

Vancouver, BC Thornhill, ON Waterloo, ON Etobicoke, ON Port Hope, ON Markham, ON Kelowna, BC Brampton, ON Port Hope, ON Toronto, ON Toronto, ON North York, ON Windsor, ON London, ON

Nepean, ON Hamilton, ON King City, ON Tehran, Ottawa, ON Windsor, ON North York, ON Mississauga, ON East York, ON Toronto, ON Toronto, ON Tehran, Vancouver, BC

Canadian Student Honour Roll

Name/Nom

Levelton Liu Liu Lustgarten Song Wise Xu Young Zhang Yipei

Group 4: Scores from 51 to 54

Berryhill Boneng Joanna Chuang Henry Filippov Serghei Gershoig Ariel Harding James Huang Lisa Johnson Adrien Kavanagh Ryan Kiil Ranek Li Erica Liu Evan Marcucci Michael Mccallum Keegan Oin Haotian Sikes Kalev Sutton Andrew Woo Joyce Yan Eric Yin Bo Yoon Juil Yuan Samuel Zhang Shaohua

Scott Alison Victor Lior Geoffry Zachary Scott Billy

School/École St. George's School Nepean H.S. Dr. Norman Bethune C.I. William Lyon Mackenzie C.I. Lisgar C.I. The Country Day School Agincourt C.I. Vincent Massey S.S. Agincourt C.I.

Bluevale C.I. Centennial C. & V.I. St. George's School Richview C.I. Sir Robert Borden H.S. Centennial C. & V.I. Erindale S.S. Richmond Hill H.S. E.S.C. Marie-Rivier Harry Ainlay H.S. Vincent Massey S.S. St. George's School Loyola C.S.S. Richview C.I. Woburn C.I. A.Y. Jackson S.S. Holy Trinity School Woburn C.I. Riverdale C.I. Erindale S.S. The Yorkland School Markham D.H.S. Agincourt C.I.

Palmarès des éves à l'échelle nationale

Vancouver, BC Ottawa, ON Scarborough, ON North York, ON Ottawa. ON King City, ON Scarborough, ON Windsor, ON Scarborough, ON Waterloo, ON Guelph, ON Vancouver, BC Etobicoke, ON Nepean, ON Guelph, ON Mississauga, ON Richmond Hill, ON Kingston, ON Edmonton, AB Windsor, ON Vancouver, BC Mississauga, ON Etobicoke, ON Scarborough, ON North York, ON Richmond Hill, ON Scarborough, ON Toronto, ON Mississauga, ON North York, ON Markham, ON Scarborough, ON

Location/Endroit

Senior Competitors

Students are listed in alphabetical order within each group. Dans chaque group, les élèves sont nommés en ordre alphabetiques.

Name/Nom

Sun

Xu

Matthew

Peter

School/École

Location/Endroit

Scarborough, ON

North York, ON

Invitees to Stage 2 of the 2009 Canadian Computing Competition

Invitees to Stage	2 of the 2009 Canadian Col	inputing Competition	
Andre	Tyson	Richmond Hill H.S.	Richmond Hill, ON
Ban	Frank	Vincent Massey S.S.	Windsor, ON
Bi	Brian	Woburn C.I.	Scarborough, ON
Chang	Michael	Thornlea S.S.	Thornhill, ON
Cheng	Robin	Pinetree S.S.	Coquitlam, BC
Dhaliwal	Amarvir	Woburn C.I.	Scarborough, ON
Hu	David	Western Tech. Comm. School	Toronto, ON
Li	Tong Shu	Woburn C.I.	Scarborough, ON
Liu	Zhiqiang	Don Mills C.I.	North York, ON
Majdzadeh	Ali	Port Moody Sr. S.S.	Port Moody, BC
Plachta	Jacob	Woburn C.I.	Scarborough, ON
Schneider	Jonathan	University of Toronto Schools	Toronto, ON
Shen	Andrew	Thornhill S.S.	Thornhill, ON
Szymanski	Thomas	Vincent Massey S.S.	Windsor, ON
Tahrif Bappi	Golam	Waterloo C.I.	Waterloo, ON
Wang	Hanson	Woburn C.I.	Scarborough, ON
Wang	Zheng	The Woodlands School	Mississauga, ON
Wen	Weinan Peter	Vincent Massey S.S.	Windsor, ON
Wong	Jamie	Lisgar C.I.	Ottawa, ON
Zhang	Cyril	Don Mills C.I.	North York, ON
Honourable Men	tion		
Alman	Joshua	University of Toronto Schools	Toronto, ON
Bhuiyan	Shaon	Vincent Massey S.S.	Windsor, ON
Dobrin	Anton	Northern S.S.	Toronto, ON
Drouillard	Chris	Belle River D.H.S.	Belle River, ON
Du	Eddie	Richmond Hill H.S.	Richmond Hill, ON
Duong	Adrian	William Lyon Mackenzie C.I.	North York, ON
Duyck	James	Vincent Massey S.S.	Windsor, ON
Fung	Felix	Victoria Park C.I.	North York, ON
Fung	Henry	The Woodlands School	Mississauga, ON
Galperin	Daniel	Waterloo C.I.	Waterloo, ON
Khan	Samin	Vincent Massey S.S.	Windsor, ON
Lee	Edward	Vincent Massey S.S.	Windsor, ON
Li	Ke	The Woodlands School	Mississauga, ON
Macfie	Andrew	Sir Robert Borden H.S.	Nepean, ON
Park	Daniel	University of Toronto Schools	Toronto, ON
Pauls	Leigh	Sir Winston Churchill S.S.	St Catharines, ON
Qiao	Aurick	Vincent Massey S.S.	Windsor, ON
Steel	George	Aurora H.S.	Aurora, ON
0	Martin		C. I. ON

Woburn C.I.

Don Mills C.I.

Canadian Student Honour Roll

Harry

Edward

Joe

Name/Nom Yu Zeng Zhang

Group 3: Scores from 31 to 38

Bedley Alex Charpentier Laurie Davies Doan Andy Fang Kevin Gao Jack Grandfield Charles Guo Daniel Ianus Alex Jensen Brook Kwon Soon Hyung Robert Lee Makarov Serguei Martin Alexander Ng Garry Rosu Cristina Shen Tong Stan Alexandru Tang Ceen Ming Tsai Yi Ting Walton Brandon Xi Xiao Xia Tian Zelembaba Dusan Zghal Omar

Group 4: Scores from 28 to 30

Burden Robert Cai Oianli Chen Michael Davydov Dan Dixon Tyler Dumitrescu Eduard Javaid Usama Amlesh Jayakumar Koff Jonathan Lei Terence Leung Samuel Lindsay Aaron Lu Kevan Wenhao Lue Mustafa Harun Nadeau Philippe Rasmussen Andrew

Palmarès des éves à l'échelle nationale

Richmond Hill H.S. University of Toronto Schools Markham D.H.S. Woburn C.I. Victoria Park C.I. Victoria Park C.I. University of Toronto Schools Don Mills C.I. Don Mills C.I. Thornhill S.S. Westminster S.S. Thornlea S.S. The Abelard School Don Mills C.I. Victoria Park C.I. University of Toronto Schools Unionville H.S. Cardinal Newman C.S.S. Unionville H.S. Vincent Massey S.S. O'Neill C.V.I. Waterloo C.I. The Woodlands School Vincent Massey S.S. Vincent Massey S.S.

Unionville H.S. Unionville H.S. Vincent Massey S.S. Richmond Hill H.S. Eastview S.S. College Notre-Dame du Sacr-Coeur Vincent Massey S.S. Waterloo C.I. Northern S.S. Lisgar C.I. A.Y. Jackson S.S. Sinclair S.S. Richmond Hill H.S. Bayview Glen School Woburn C.I. College Notre-Dame du Sacr-Coeur Edmonds Woodway H.S.

Location/Endroit North York, ON North York, ON Ottawa, ON

Richmond Hill, ON Toronto, ON Markham, ON Scarborough, ON North York, ON North York, ON Toronto, ON North York, ON North York, ON Thornhill, ON London, ON Thornhill, ON Toronto, ON North York, ON North York. ON Toronto, ON Markham. ON Stoney Creek, ON Markham, ON Windsor, ON Oshawa, ON Waterloo, ON Mississauga, ON Windsor, ON Windsor, ON

Markham, ON Markham. ON Windsor, ON Richmond Hill, ON Barrie. ON Montreal, QC Windsor, ON Waterloo, ON Toronto, ON Ottawa, ON North York, ON Whitby, ON Richmond Hill, ON North York, ON Scarborough, ON Montreal, OC Edmonds, WA

Canadian Student Honour Roll

Palmarès des éves à l'échelle nationale

Name/Nom		School/École	Location/Endroit
Roman	Jeremy	Sir John A. Macdonald S.S.	Waterloo, ON
Rosen	Yohei	Eric Hamber S.S.	Vancouver, BC
Shaan	Saravannan	Woburn C.I.	Scarborough, ON
Sheng	Chao Qun	Unionville H.S.	Markham, ON
Snider	Cory	Academy for Gifted Children-PACE	Richmond Hill, ON
Tam	Gregory	St. George's School	Vancouver, BC
Venis	Adam	University of Toronto Schools	Toronto, ON
Vul	Andrey	Thornlea S.S.	Thornhill, ON
Wong	Chris	Unionville H.S.	Markham, ON
Wong	Kelvin	Unionville H.S.	Markham, ON
Woods	David	Eric Hamber S.S.	Vancouver, BC
Zung	Jonathan	University of Toronto Schools	Toronto, ON

Problem Averages

Problem	All Contestants	Non-Zero Scores	Problem	All Contestants	Non-Zero Scores
Junior 1	13.14	14.71	Senior 1	9.06	10.56
Junior 2	4.75	10.32	Senior 2	2.43	6.27
Junior 3	9.17	11.58	Senior 3	2.26	7.75
Junior 4	1.91	9.77	Senior 4	0.55	7.56
Junior 5	0.42	6.78	Senior 5	0.51	5.26

The averages denoted as "All Contestants" in the above table indicate all students in the division. The averages denotes 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 653 Senior contestants and 836 Junior contestants.

Student Rankings

Classement des élèves

	Ju	nior C	ompetito	ors			Se	nior C	ompetito	ors		
Score/	Rank/											
Note	Position											
75	1	50	71	30	325	75	1	41	35	21	141	
73	3	49	79	29	402	67	3	40	36	20	153	
72	4	48	81	28	406	66	4	39	38	19	164	
68	8	47	92	27	417	65	7	38	44	18	168	
66	9	46	98	26	528	64	8	37	45	17	196	
65	10	45	102	25	532	62	9	36	48	16	207	
64	12	44	147	24	545	61	10	35	50	15	213	
63	13	43	149	23	639	60	12	34	51	14	303	
62	14	42	155	22	641	57	13	33	54	13	308	
61	16	41	192	21	650	53	14	32	59	12	320	
60	19	40	194	20	668	52	15	31	64	11	380	
58	26	39	201	19	670	50	16	30	69	10	385	
57	32	38	221	18	674	49	18	29	85			
56	38	37	226	17	687	48	21	28	94			
55	42	36	238	16	689	47	24	27	98			
54	48	35	260	15	691	46	25	26	106			
53	55	34	269	13	764	45	27	25	112			
52	59	33	273	12	770	43	30	24	115			
51	66	32	312	11	784	42	34	23	123			

2009 Canadian Computing Competition Committee

Rich Clausi	Prof. Gordon Cormack	Sandy Graham
Elmira District Secondary School	Cheriton School of Computer Science	Office of the Dean – Mat
Elmira, Ontario	University of Waterloo	University of Waterloo
Graeme Kemkes	Prof. Vlado Keselj	Andy Kong
Graduate Student	School of Computer Science	Undergraduate Student
University of California, San Diego	Dalhousie University, Halifax, NS	University of Waterloo
Prof. Ondřej Lhoták	Prof. J. Ian Munro	Ron Ouwerkerk
School of Computer Science	Cheriton School of Computer Science	St. George's School
University of Waterloo	University of Waterloo	Vancouver, BC
David Pritchard		Troy Vasiga (Director)
Graduate Student		Cheriton School of Com
University of Waterloo		University of Waterloo