

IMO 2013 • SANTA MARTA, COLOMBIA





Calvin Deng Team Member

Calvin Deng was born in Saskatoon, Saskatchewan in 1996. He currently lives in Cary, North Carolina.

He first started getting involved in math competitions in Grade 6, where he first competed in the MathCounts and AMC competitions. He soon ascended the competitions ladders, placing fourth overall at the National MathCounts competition in 2009 and qualifying for the USAMO.

Calvin attended the National Math Camp after Grade 8, where he met and (unfortunately) lost to fellow IMO Team member Alex Song on the Mock Olympiad

administered there. Since then, Calvin has enjoyed considerable success on Math Olympiads, earning a Silver Medal and a Gold Medal at the International Mathematical Olympiad.

This year, Calvin earned First Prize on the Canadian Math Olympiad and a Gold Medal on the Asian Pacific Math Olympiad for Canada, each for the second time. He also was a USA Math Olympiad winner for the third time, placing third.

Besides doing mathematics, Calvin also does competitive programming, and will be representing Canada at the International Olympiad in Informatics. His non-academic pursuits include playing sports (in particular, ultimate Frisbee and basketball), playing the clarinet, and Dominion.

Calvin recently finished Grade 12 at the North Carolina School of Science and Mathematics, and will be attending Harvard University this fall.



John Ma Team Member

John (Zhiyao) Ma was born Beijing, China. He moved to Ontario, Canada at the age of three, and resided there for the next 10 years. He currently studies at Interlake High School in Bellevue, Washington. He has two wonderful twin sisters in Grade 6, and a caring father and mother.

John initially became interested in math when his friend introduced him to the Art of Problem Solving series of books in the ninth grade. His passion for math grew after participating in his first math camp, SIMUW, which he found to have “opened his eyes to many facets of mathematics in which he did not know about before.”

That year, he also joined his school’s math club, which included many of top high school mathematicians in the state. John took the AMCs in 10th grade, qualifying for the USAJMO, and eventually went on to become one of the winners of the USAJMO. That summer, he participated in MOSP (Mathematical Olympiad Summer Program). In junior year, he qualified for the USAMO, and attained Honorable Mention in the CMO, and again in senior year.

Besides math, John also enjoys piano, Frisbee, and swimming. He finds piano a great way to relax, and has found having an understanding of music to be very fulfilling in everyday life. Frisbee and swimming are John’s primary forms of exercise.

Next year, John will be attending the Massachusetts Institute of Technology in Boston, Massachusetts.



Alex Song Team Member

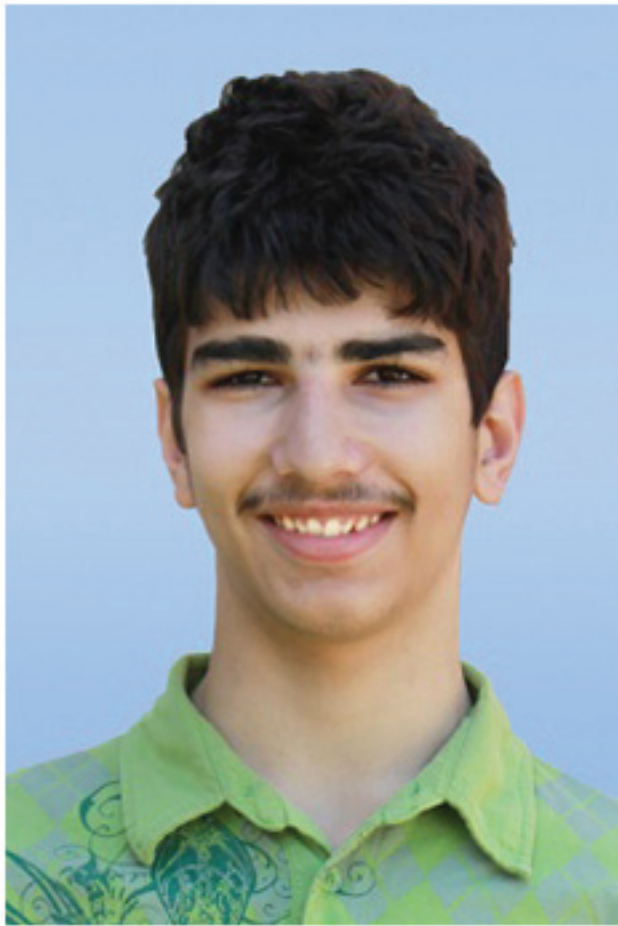
Zhuoqun (Alex) Song is currently a rising junior attending school at Phillips Exeter Academy. Born in Tianjin, China, he immigrated to Canada at the age of five with his parents.

As Chinese was his first language, his first year at Canada was instrumental in developing the English skills to be integrated into the Canadian community. He started participating in mathematics competitions at a young age, taking the Pythagoras Competition in Grade 1 under the recommendation of his elementary school teacher, Mrs. Birrell.

After placing fourth in his school, his talent was recognized and he started to receive tutoring sessions from a retired high school math teacher, Mr. Bristow, which included both mathematics from a typical high school curriculum as well as excursions into combinatorics and number theory. He would participate in the Pythagoras Competition again for the next two years, and take the Canadian Open Mathematics Challenge for the first time in Grade 4.

At around this time, along with other mathematics students in Waterloo, Ontario, he was placed under the tutelage of Mr. Wolczuk, where he got his first experience of math at the undergraduate level. Starting slow with the numerous new and unfamiliar topics, by the end of sixth grade he finally understood the way of axiomatic thinking and reasoning necessary for advanced mathematics.

He went on to qualify for the IMO for the first time in 2010, where he received a bronze medal. Since then, he has participated in numerous math competitions both in Canada and the United States of America.



Daniel Spivak Team Member

Daniel Spivak was born in Tel Aviv, Israel in 1995. He moved to Canada with his family at the age of nine, and has been living in the GTA since. He has graduated from the International Baccalaureate program at Bayview Secondary School this year, and will pursue a further education in pure mathematics at the University of Waterloo as a recipient of the prestigious Mike & Ophelia Lazaridis Olympiad Scholarship.

Daniel became interested in math at the age of three, and was taught by his parents and older brother for several years. He wrote his first math contest in Grade 3, winning the city-wide math contest intended for Grade 5 students,

and was allowed to participate in a Grade 10 math course the next year. He continued to write math contests once he moved to Canada in 2005, and achieved high scores on multiple contests, including perfect scores in Pascal, Cayley and Fermat, as well as top five in Euclid in 2011, 2012 and 2013.

In 2010, Daniel qualified for the USAMO. The next year he got a perfect score on the AMC 10B, honourable mentions in the CMO and USAJMO, as well as a Bronze medal in the APMO. In 2012, Daniel was invited to the Canadian Winter Olympiad Training Camp. He got a perfect score on AIME, placed 3rd on the CMO and got a bronze medal on IMO 2012.

Daniel is also interested in Computer Science; last year, he was invited to stage two of the Canadian Computing Competition, and received a silver medal. Daniel enjoys swimming and alpine skiing in his spare time.



Kevin Sun Team Member

Kevin Sun is 14 years old and currently a Grade 9 student at Naperville Central High School.

Kevin became interested in math at a very early age. He started doing math competitions in 6th grade. He took the AMC series and made it to the USAJMO in 6th grade. In 7th grade and 8th grade, he got into the Countdown Round in Mathcounts Nationals and was a quarter finalist in 8th grade.

Kevin began doing Olympiad math in eighth grade. In eighth grade, Kevin qualified for CMO and USAMO, and received an Honorable Mention on the CMO. This year, Kevin got third place in both COMC and CMO and was invited

to attend the Winter Camp. He also got a silver medal on APMO.

In addition to mathematics, Kevin is also interested in Computer Science; this year, he was invited to Stage two of the Canadian Computing Competition, and received a silver medal. He also likes to do logic puzzles and puzzle hunt puzzles in his spare time.



Alexander Whatley Team Member

Alexander was born in 1996 in Vancouver, British Columbia and is proud to be a native of that beautiful city. Alexander is a 10th grade student following a non-traditional curriculum.

He attends courses in advanced mathematics and sciences at Texas A&M University through a program for high school students and studies other subjects on line. He is also a preparatory student at Rice University's Sheperd School of Music where he studies music theory and piano performance with Dr. Darius Pawlas.

In 6th grade Alexander began participating in the AMC and MathCounts competitions. In 7th grade he first qualified for the AIME and in 8th grade qualified

again for the AIME and was also named to the Texas team at National MathCounts. In 9th grade he made progress in more advanced competitions, with full scores on the AIME and COMC, qualifying for the USAMO, honorable mention on the CMO and a Bronze medal on the APMO.

In 10th grade Alexander has achieved a full score on the AMC 12A, USAMO qualification, honorable mention on the CMO examination and a Bronze medal on the APMO. He is honored to be named to the Canadian team and is looking forward to working hard with his teammates to represent Canada well at the IMO.

Alexander's interests outside of mathematics include music, physics, tennis and swimming. He was a Semifinalist in the US Physics Olympiad in 2012 and 2013 and has been awarded a number of prizes for piano performance, most recently the Silver Medal at the International Chopin Competition.

Alexander would like to express his gratitude to his teachers and mentors, Professor David Benzel, Mrs. Isil Nal, Dr. J Maurice Rojas of Texas A&M University and especially Dr. Zachary Franco of the Houston Math Circle for their guidance and support.



Ralph Furmaniak Team Leader

Ralph Furmaniak is currently pursuing a PhD at Stanford University with Kannan Soundararajan.

He competed for Canada at the Glasgow IMO in 2002, won Putnam Fellow in first year of undergrad at University of Waterloo in 2003, and also competed in the World Finals of the ACM International Collegiate Programming Competition in Prague in 2004 and Shanghai in 2005, winning a gold medal and north american champion.

While finishing his undergrad he began work heading math research at Gotham Capital in New York, before leaving that to pursue his interest in analytic number theory.

In his spare time he likes to do other types of math, and also work on tech projects. In his sparer time he is enjoying the outdoors of California: skiing, hiking, backpacking, biking.



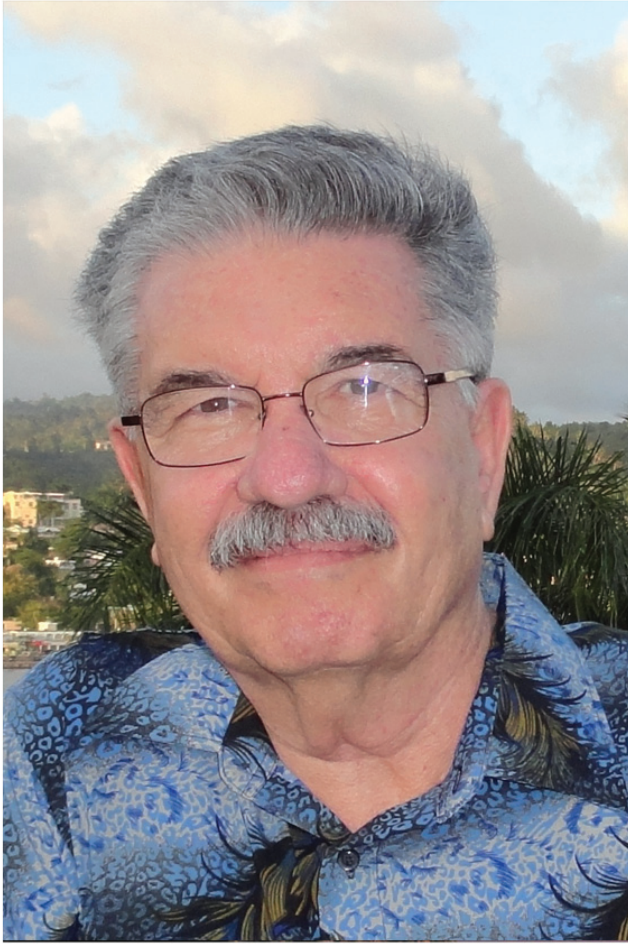
Robert Morewood Deputy Leader

Robert Morewood is currently working with Yworld.com, helping develop the next big thing on the internet, with highly efficient data structures and algorithms to comfortably handle collaboration between many millions of professionals.

Born in Quebec City, Robert drifted west, attending the University of Alberta (where he was part of their Honourable Mention Putnam team) before earning M.Sc and B.Ed degrees at the University of British Columbia and settling into two decades of teaching on the West Coast. During that time he become involved with marking various math contests and got caught up in IMO

training, leading Canada's team to Slovenia in 2006.

In his spare time, Robert enjoys cooking for his family, delving into recreational math problems, and practicing Ballroom Dancing.



Felix Recio Observer A

Felix Recio recently retired after almost fifty years of an enjoyable career as a mathematics lecturer, most of the last twenty five years at the University of Toronto.

He is currently doing some light teaching and participating in a course development project about the role of proofs and problem solving in learning mathematics.

He was born in Cuba and attended several International Mathematical Olympiads from 1972 to 1983 as a leader or deputy leader of the IMO Cuban teams.

In Canada, he has been involved with math competitions since 1990, he was a Problem Captain during the 36th IMO in 1995 (Toronto), and a member of the IMO Canadian teams in 2004, 2005 and 2008.

As a retiree, he finally has enough time for his main hobbies which include travel, sports, reading, music, and of course, helping with math contests.