

Contributor Profiles:

Arkady Alt



Arkady Alt was born in Odessa, Ukraine, by the Black Sea. His interest in mathematics began when he was in middle school. At first, his mother had to constantly demand persistence from him and fight his negligence when he was solving math problems, but since he was very interested in astronomy and physics he quickly realized that to really understand those subjects he had to know mathematics.

His professional career initially began in applied mathematics, focusing on engineering and economics, but in 1981 he switched to an educational career path and began teaching at High School No. 100 in Odessa, where he created a specialized math course that exposed students to advanced topics at the Olympiad and University level. This evolved into a special two-year program which united Mathematics and Computer Science into one course, unique in the country at the time. Many graduates from this program subsequently participated in and won national level Mathematics competitions, with some going into academia and beyond.

When the cold war ended he moved his family to Israel, where he taught children and adults ranging from high school to university and Olympiad level. Several of his students completed their high school math requirements early and enrolled in university prior to full high school graduation. Two of them won gold and silver medals at the IMO in 1995 – 1997.

At university Arkady Alt was drawn to Topology and Algebra. Soon after graduating he discovered Serge Lang's *Algebra*. Finally group theory, number theory, topology, and linear algebra were all yoked together and he was inspired to publish on those topics in conjunction with concrete problems. At his suggestion many students have read this book from cover to cover.

After his immigration to Israel he began working in the field of inequalities, where he saw amazing opportunities to apply a host of techniques. He delights in finding elegant solutions free of heavy machinery so he can share the problems with his students.

He now lives in San Jose, California, with his wife and two adult children, who were also raised to love mathematics. He still teaches and is currently working on a book on inequalities that will contain the methods he has developed over the years. He is an active problem solver and proposer in many current mathematics publications, where he often finds new problems for himself and his students.

His other interests include philosophy, history, music, and reading.