IN CHARACTER

A conversation with an interesting Portlander

Aziz Inan

By PETER KORN
The Tribune

Mommy, why is that man wearing a funny hat? That's Aziz Inan, dear, professor of electrical engineering at the University of Portland, and he's using the hat to demonstrate to students that Benjamin Franklin's birthday is a numerical palindrome.

TRIBUNE PHOTO: CHRISTOPHER ONSTOTT

Aziz Inan's life changed two years ago, when he noticed that April 1, 2009, otherwise known as 04012009, was both a square number and April Fool's Day.

Maybe it was the fact that Inan was able to quickly make those two observations that led to his hobby, which can modestly be described as an enthusiasm for numbers. Lately, Inan, a professor of electrical engineering at the University of Portland, has begun publishing articles about odd characteristics of numbers, as opposed to odd number characteristics, and having a lot of fun in the process.

Portland Tribune: So, what's with the numbers?

Aziz Inan: I make puzzles as a hobby. For example, President Barack Obama was born Aug. 4, 1961. So I took that full date number and as I played with it, I broke it in the middle and all of a sudden I realized there's something in this number that tells people that Barack Obama was going to be president in 2009 at age 47.

Tribune: Explain, please.

Inan: Here's how I figured this out. I wrote 08041961. This is his birthday — Aug. 4, 1961. Then I broke the number between the digits one and nine and I took the two numbers — 8041 and 961 — and added them up, and guess what I found? 9002.

Tribune: Which means absolutely nothing to me.

Inan: This is the reverse of 2009.

Tribune: Oh.

Inan: Then I said, let's go back to this number here — 08041961 — and I broke it into two-digit numbers starting from the right — 61, 19, 04 and 08. I took 61 and reversed it.

Tribune: Well, what gives you the right to reverse it? Who made that rule?

Inan: I was looking for cryptic information that Barack Obama was going to be president at age 47.

Tribune: Wait a minute. You're a respected engineering professor. If you start with a solution and work back looking for possible manipulations to fit that solution, what do you call that?

Inan: Reverse engineering, if I recall correctly.

Tribune: I think it's something else, but please, go on.

Inan: I took these four numbers, each two digits, with 61 turned into 16, and I simply added them up. And guess what? I found 47, which is the age Barack Obama became U.S. president.

Tribune: Hold on. How long did it take you to do this?

Inan: Probably half an hour, an hour.

Tribune: So this is easy for you?

Inan: I'm at a point where I can take a number, break it into pieces, reverse it, cut it in

On the web

For a look at some of Aziz Inan's numerical brainteasers, including his analysis of a recent rare palindrome day (1-10-2011), go to:

- http://tinyurl.com/5shwz5n
- http://tinyurl.com/4fbxx2e
- http://tinyurl.com/4e6h2c9

half, add the two halves, subtract the halves, take the square of each, add them up. I do this sort of thing.

Tribune: Why?

Inan: When I do that all of a sudden I stumble on a property of a number that other numbers may not have.

Tribune: And you especially like numerical palindromes.

Inan: Many of us have a tendency to make things symmetric. Symmetry has its own magic power.

Tribune: You realize these are just numbers. They're not people. They're not even theories.

Inan: I think that numbers are like people. They have their own special personalities.

Tribune: So give me the number of a personality.

Inan: Forty-eight. Number 48 is the only two-digit number that, if you break it into two single digits, four and eight,

square each digit and subtract them from each other, you get the number 48 back.

Tribune: How does your family feel about your enthusiasm? For instance, do you have children?

Inan: I have two boys.

Tribune: Have you done things with the numbers of their birth dates?

Inan: Their birthdays are May 29 and Sept. 25, and I found that May 25 is 529 and Sept. 25 is 925. These are the reverse of each other.

Tribune: And did you tell your sons?

Inan: I think they got interested. They said, "Oh, that's a nice connection."

Tribune: How old are they?

Inan: Nineteen and 16.

Tribune: Teenagers. Are you sure they weren't humoring you?

Inan: It depends on their mood. If they have homework or other stuff ...

Tribune: Does any of this apply to your engineering teaching?

Inan: I use it to get students' attention when they're falling asleep (in class).

Tribune: So that's the magic you were talking about.

Inan: Most of the time it gets their attention.