Fundraiser to benefit Truckee organizations

The Tahoe Donner Giving Fund will host its fourth annual dinner and silent auction on July 11 at 6pm at the Pavilion Tent at the Lodge Restaurant & Pub.

Proceeds from the event funds fall grants supporting local nonprofits in the greater Truckee area and scholarships to community high school graduates.

Graham Kent will be the guest speaker. Kent is the founder of AlertTahoe, a system of cameras streaming real-time images to firefighters, other emergency personnel, and the public. He is also the director of the Nevada Seismological Laboratory and professor in the Department of Geological Sciences and Engineering at UNR.

Tickets are $100 per person and can be purchased **online**.

AAUW sending Tahoe girls to STEM event

American Association of University Women, South Lake Tahoe branch recently awarded three sponsorships to a weeklong STEM (science, technology, engineering, mathematics) focused Tech Trek Camp on the UC Davis campus in July.

Winners are Kyla Schrauben, Daniela Bonilla, and Evelyn Bennett. All three girls are from South Tahoe Middle School, with an alternate, Mia Roper, chosen from Whittell.

These girls who are entering eighth grade in September were nominated by their science/math teachers and selected following a personal interview. Girls will live in a dormitory, eat at the dining commons, and attend workshops in one of five fields: anatomy/physiology, genetics, engineering, 3-D math, and coding express.

AAUW provides scholarships to LTCC grads

The American Association of University Women, South Lake Tahoe branch recently awarded two $1,500 scholarships to women graduating from Lake Tahoe Community College and going on to further their education at the college or university level.

Both winners are from South Lake Tahoe. Hannah Brown attained an associate’s degree in math and Spanish from LTCC and will be attending UC Davis to major in computer science. Kat Spence, who has already attained several associate’s degrees is graduating from LTCC with a degree in math application, will be attending UC Davis to major in civil engineering.

AAUW is dedicated to advancing equity for women and girls through advocacy, education, philanthropy and research.

Photo contest all about state

parks in U.S.

The second annual America’s State Parks 2018 photo contest has a focus on highlighting real-life moments and celebrating the essence of state parks.

The contest encourages amateur photographers to submit photos taken at a state park within the five categories of camping, wildlife, activities, friends and family, and scenic and seasons.

From now until July 31, participants may submit entries **online**.

Of the more than 8,000 entries submitted nationwide during last year, the winning photo featured Nevada’s Ward Charcoal Ovens State Historic Park.

Tahoe Tails – Adoptable Pets in South Lake Tahoe

Chola

Chola is a 2-year-old beautiful blue brindle purebred Cane Corso. She is a large dog, but she is a gentle soul and loves to be with her people. She has lived with dogs, cats and poultry.

Chola is a low to medium energy girl who is very sweet, loves to go for walks, and takes treats very gently.

Chola will be spayed soon, and is microchipped, tested for heart worm, and vaccinated. She is at the El Dorado County Animal Services shelter in Meyers, along with other dogs and cats who are waiting for their new homes. Go to the Tahoe animal shelter's Facebook page to see photos and descriptions of all pets at the shelter.

Call 530.573.7925 for directions, hours, and other information on adopting a pet. For spay-neuter assistance for South Tahoe residents, go **online**.

– Karen Kuentz

Predicting suicide is a difficult, complex challenge

By Joseph Franklin, The Conversation

Who is going to die by suicide? This terrible mystery of human behavior takes on particular poignance in the wake of suicides by high-profile and much-beloved celebrities Kate Spade and Anthony Bourdain. It is only natural that people want to know why such tragedies occur. Those closest to those who take their lives are often tormented, wondering if there is something they could have – or should have – known to prevent their loved one's suicide.

As a scientist who has focused on this question for the past decade, I should have a pretty good idea of who is and isn't going to die by suicide. But the sad truth is, I don't. The sadder truth is, neither do any other suicide experts, psychiatrists or physicians. The sum of the research on suicide shows that it does not matter how long we've known someone or how much we know about them. In my research, my colleagues and I have shown that we can only predict who is going to die by suicide slightly more accurately than random guessing.

The need for answers

The fact that suicide is so hard to predict unfortunately took about 50 years for most scientists to appreciate. About the same time that this recognition became widespread a few years ago, a new hope emerged: a form of artificial intelligence called machine learning. As several research groups have demonstrated in recent years, machine learning may be able to predict who is going to attempt or die by suicide with up to 90 percent accuracy.

To understand why this is, and why we humans won't ever be

able to accurately predict suicide on our own, one needs to take a step back and understand a little more about the nature of human cognition, suicide and machine learning.

As humans, we love explanations that have two qualities. First, explanations should be simple, meaning that they involve one or a small number of things. For example, depression is a simple explanation for suicide.

Second, explanations should be determinate, meaning that there is one set explanation that accounts for all or most of something. For example, the idea that depression causes most suicides is a determinate explanation. This simple and determinate explanatory style is highly intuitive and very efficient. It's great for helping us to survive, procreate, and get through our days.

But this style of thinking is terrible for helping us understand nature. This is because nature is not simple and determinate. In recent decades, scientists have come to recognize that nearly everything – from physics to biology to human behavior – is complex and indeterminate. In other words, a very large number of things combined in a complex way are needed to explain most things, and there's no set recipe for most physical, biological or behavioral phenomena.

I know that this latter idea of indeterminacy is especially counterintuitive, so let me provide a straightforward example of it. The math equation X plus Y equals 1 is indeterminate. As humans, we instinctively try to find one solution to this equation (e.g., X equals 1, Y equals 0). But there is no set recipe for solving this equation; there are nearly infinite solutions to this equation. Importantly, however, this does not mean that "anything goes." There are also near infinite values for X and Y that do not solve this equation. This indeterminate middle ground between "one solution" and "anything goes" is difficult for most humans to grasp, but it's how much of nature works.

The sum of our scientific evidence indicates that, just like most other things in nature, the causes and predictors of suicide are complex and indeterminate. Hundreds, and maybe thousands, of things are relevant to suicide, but nothing predicts suicide much more accurately than random guessing. For example, depression is often considered to be an extremely important predictor of suicide. But about 2 percent of severely depressed people eventually die by suicide, which is only slightly higher than the 1.6 percent of people from the general United States population who eventually die by suicide. Such a pattern is consistent with complexity because it suggests that we must put a lot of factors together to account for suicide.

Empathy will always matter

So how should we put all of these factors together? One intuitive solution is to add many of these factors together. But even when summing hundreds of factors, this doesn't work — prediction is still only slightly more accurate than random guessing.

A much better solution would be to somehow find an optimized combination of tens or even hundreds of factors. How can we do this? One promising answer is machine learning. In short, machine learning programs can process a large amount of data and learn an optimal combination of factors for a given task. For example, most existing machine learning studies have used data from electronic health records, spanning hundreds of factors related to mental health diagnoses, physical health problems, medications, demographics and hospital visit patterns. Results from several groups in recent years have shown that this approach can consistently predict future suicide attempts and death with 80-90 percent accuracy. Multiple groups are currently working on applying these algorithms to actual clinical practice.

One important thing to keep in mind is that there isn't, and

never will be, a single algorithm or recipe for suicide prediction. This is because suicide is indeterminate, much like the X plus Y equals 1 equation. There are likely near-infinite algorithms that could predict suicide with 80-90 percent accuracy, as a number of studies have shown. Research has already demonstrated that no particular factors are necessary for a good algorithm, and many different types of algorithms can produce accurate prediction. But again, this indeterminacy also means that there are near-infinite bad algorithms, too.

All of this research shows that suicide is unfortunately too complex and indeterminate for humans to predict. Neither I nor anyone else can accurately predict who is going to die by suicide or truly explain why a particular person died by suicide (this includes the suicide decedents themselves). Machine learning can do a much better job of approximating the complexity of suicide, but even it falls far short. Although it can accurately predict who will eventually die by suicide, it cannot yet tell us when someone will die by suicide. This "when" dimension of prediction is critical, and we are likely still many years away from accounting for it.

In the meantime, what can we humans do? While we don't have the ability to know whether someone is going to die by suicide or not, we do have the ability to be supportive and caring. If you believe that someone may be struggling, talk with them and let them know about resources such as the National Suicide Prevention Lifeline (800.273.8255).

Joseph Franklin is an assistant professor of psychology, Florida State University.

Road Beat: Kia Rio – maximum efficiency personified

The 2018 Kia Rio five-door is a definite hybrid beater. Photos/Larry Weitzman

By Larry Weitzman

My car review this week is one of the least expensive economy cars for sale in the United States, the Kia Rio 5 door LX edition. It stickers for $15,290 with a six-speed auto cog swapper. If you like to shift, the sticker drops to just $14,200.

Both require the obligatory delivery charge of $895 for the boat, train and truck from Pesqueria, Mexico. Even the engine and transmissions originate in Mexico. If you are worried about build quality, don’t, it’s built like every other world car in an automated factory. My tester was bank vault tight.

Rio may be the ultimate commuter/economy car as will be explained. First while the standard Rio subcompact is 17-inches long riding on a long 102-inch wheelbase, the five-door hatchback version is a handy 160-inches long which is approaching the length of a Mini-Cooper. Both are a svelte 68-inches wide. Rio five-door is small on the outside. But inside interior volumes are 2 cubic feet shy of being classified by the EPA as a mid-size car. And it's all wrapped in a pretty good looking, very well-proportioned body. It's cute.

Powering up the Rio is a sophisticated 1.6L DOHC, 16 valve, direct injected inline four-cylinder engine that cranks out 130 hp at 6,300 rpm and a commensurate 119 pounds of twist peaking at 4,850 rpm. My version had a torque converter six-speed automatic cog-swapper in place of the standard and less expensive six speed manual driving the front wheels.

Specifications

Price $15,095 to about $20,000

Engine

1.6L DOHC, 16 valve, Direct injected inline four cylinder 130 hp @ 6,300 rpm
119 lb.-ft. of torque @ 4,850 rpm

Transmissions

Six-speed manual
Six-speed torque converter

automatic

Configuration

Transverse mounted front engine/front wheel drive

Dimensions

Wheelbase 1,011.6 inches
Length 160.0 inches
Width 67.9 inches
Height 57.1 inches
Track (f/r) 60.0/60.2 inches
Ground clearance 5.5 inches
Fuel capacity 11.9 gallons
Cargo capacity (rear seats up/down) 17.4/32.8 cubic feet
Passenger volume 90.5 cubic feet
Steering lock to lock 2.77 turns
Turning circle 33.46 feet
Wheels Steel/5.5X15 inches
Tires 185/65X15
Weight 2,714 pounds

Performance

0-60 mph 8.26 seconds
50-70 mph 4.43 seconds
50-70 mph uphill 7.58 seconds
Top speed Does anyone really care?
Fuel economy 28/35/32 mpg city/highway/combined. Expect 34-35 mpg in rural/suburban driving, 47 mpg on a level highway at (California) legal speeds.

When Kia arrived in the United states some 25 years ago, its only model was the 1.5L, 79 hp Sephia which couldn’t get to 60 mph in 12 seconds even pointed downhill. Now, this foot shorter Rio will literally rocket to that benchmark of 60 mph from a stop in a quick 8.26 seconds. Who said extreme economy/commuter cars can’t be fun and quick? Passing performance is also good with a 50-70 mph simulated pass requiring just 4.43 seconds and the same run up a steep grade (6-7 percent) will slow that time down about three seconds to 7.58 seconds. Interestingly, these numbers are virtually the same as the Toyota Corolla tested last week (8.31, 4.58, 7.66 seconds).

But while it slightly outperforms the Corolla, it returns significantly better fuel economy. EPA says expect 28/35/32 mpg city/highway/combined. However, my tests revealed much better fuel economy with a two-way level highway run returning an average of 47.3 mpg and my round trip from Placerville to Carson City via Highway 50 yielding an average of 42.5 mpg. Overall, I averaged about 34 mpg. The point being that these numbers, the highway mileage and round-trip numbers are within 5 mpg of a hybrid. It also has a hybrid size small 11.9-gallon fuel tank.

So how does the Rio handle? A one-word answer would be good. It comes with steel wheels (15 x 5.5 inches) and hubcaps, 185/65 rubber and aa torsion beam rear suspension, but its electric power steering rack is a very quick 2.77 turns lock to lock. It has a turning circle of just 33 feet and it weighs just 2,715 pounds meaning the mass that needs to change directions is on the minimal side, so Rio handles quite sporty in a benign fashion with no vices. It feels good in the twisties and its attitude remains flat. Rio can be rowdy.

Ride quality is quite quiet and smooth. Noise sources are subdued as the engine spins just 2,300 rpm at 70 mph while there is little if any tire noise and no wind noise. You will forget that this is an extreme economy car. More on that

later.

Safety isn’t compromised as well as all important acronyms are present, even though only the front brakes are discs. Rears are drums, but remember the fronts do 80 percent of the stopping (unless you predominantly drive in reverse), so the brakes are strong and powerful. About the only thing missing from its safety complement is the rear-view backup camera, but a slight upgrade will net you that anyway which I will discuss later. Headlights are good on high and low beam.

Inside is a comfortable interior, seats are good and the instrument panel is complete with a trip computer being flanking by a tack and speedo. Most of the interior is hard surfaced (what do you expect for $15K?), but it has a decent sound and HVAC system. Best of all its easy to use. It has plug-ins for charging your stuff.

Rear seating is not bad and behind the rear seats, this mini-CUV holds over 17 cubes and with them folding it grows to about 33 cubes. Unbelievable for a 160-inch ride.

Unfortunately, my LX is a bare bones tester with no power windows, mirrors, Bluetooth, cruise, keyless entry and rear backup camera. However, if you opt for the “S” model one trim grade up for just a paltry $1,110 (or a $16,400 sticker), you get everything I mentioned. Or in other words a well-equipped vehicle with all the modern conveniences. Everything you need and nothing you don’t, making the “S” version of the Rio 5 door perhaps the best value in a commuter/economy car in the USA and it’s made in North America.

Rio is about $5,000-$6,000 less than the cheapest hybrid. Rio certainly outperforms the cheap hybrid and returns within about 5-7 mpg. So, it you drive 15,000 miles a year, the hybrid will save you about 80 gallons of gas, certainly no more than 100 gallons, or in other words, even in high priced California that amounts to about $300 a year, which doesn’t

even pay for the extra capitalization costs of the hybrid. Rio makes a whole lot of dollars and sense.

Larry Weitzman has been into cars since he was 5 years old. At 8 he could recite from memory the hp of every car made in the U.S. He has put in thousands of laps on racetracks all over the Western United States.

South Shore fundraiser for metastatic breast cancer

If you know someone who has died from breast cancer, they died from metastatic breast cancer.

“Metastatic” means the cancer has escaped the breast and traveled to distant sites, like bones, lungs, liver, or brain. Cancer that stays in the breast does not kill.

Approximately 6 percent of initial breast cancer diagnosis are metastatic, and approximately 28 percent of women and men with early stage breast cancer will become metastatic; the median life expectancy after a diagnosis of metastatic breast cancer is 36 months, and in 2018 more than 41,000 Americans will die due to metastatic breast cancer.

Despite this reality, the large breast cancer fundraisers only give a small percentage of their research funds to studying ways to help the already metastasized patient. Many experts believe we are on the cusp of making metastatic breast cancer a chronic disease, if only there were more money to do the research needed to develop effective treatments.

METAvivor, a nonprofit organization with a volunteer board

(the majority of whom have metastatic breast cancer themselves), directs 100 percent of donations to such metastatic research, through a vigorous scientific peer-review process.

There will be a fundraising concert at Kahle Community Park in Stateline on June 25 from 6-9pm. Ike and Martin will provide the music. There will be food available. Bring your own beverage that is not in a glass container. No dogs allowed.

Minimum donation is $20.

Cat adoption fees in El Dorado County lowered

For a limited time, El Dorado County Animal Services has lowered its adoption fee for adult cats at its shelters in Diamond Springs and South Lake Tahoe. Adult cats over the age of 1 year can be adopted at either shelter for $20 through the end of July.

All adoptable cats at the shelters are spayed or neutered, microchipped, vaccinated, tested for leukemia and given a health exam.

The Animal Services shelter in Diamond Springs is located at 6435 Capitol Ave. and is open Monday through Saturday from 9:30am-4:30pm. The shelter in South Lake Tahoe is located at 1120 Shakori Drive and is open Monday through Saturday from 9:30am to noon and 1-4:30pm.

Animal Services has additional information, including pictures

of adoptable animals, on its **website**.

Homebrew competition to benefit homeless

Tahoe Coalition for the Homeless will be hosting the Tahoe Beach Bash, featuring the fourth annual Homebrew for the Homeless.

This family-friendly event at Tahoe Beach Retreat in South Lake Tahoe will feature live music, homebrew beer competition, lakeside barbecue, bounce house, local vendors, child-friendly obstacle course, and other entertaining activities for people of all ages.

It will be July 28 from noon-4pm.

All proceeds from the event will be used to support Tahoe Coalition for the Homeless. TCH opened the South Lake Tahoe warm room, the first temporary emergency winter shelter in the area, for the third winter on Dec. 24, 2017. Since inception it has served 298 individuals and provided more than 7,300 shelter bed nights. In 2017, 26 percent of guests were employed and 87 percent of guests were living in the South Lake Tahoe area when they became homeless.

Early ticket pricing is available. General entry tickets are $20 per person, which includes all activities and live music, as well as food and non-alcoholic beverages. Tickets for children under 12 are $10, with children 5 and under free. Tickets for the poker run which includes homebrew tasting (open to those 21 and over) are $40, including general entry.

For more information, to purchase tickets, or to enter the homebrew competition, go **online.**