

LinkedIn Post and Impressions:

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<https://web.cortland.edu/romeu/>

Revisiting Engineering Methods to Help Distribute Food and Medical Supplies in Gaza

A year ago, we posted a report on using Quality and Productivity Engineering methods for the Distribution of Food and Medical Supplies to the Civilian Population of a city under siege. This report was illustrated with several PPTs of the final projects of our excellent Syracuse University graduate engineering students. Today, given the catastrophic lack of food situation in Gaza (see <https://www.cfr.org/article/gazas-food-crisis-worsening-what-know>) we are reposting the report, with the hope that those in position to help may find in it some useful ideas they can use. Read it: https://www.researchgate.net/publication/382489101_Quality_Engineering_Helping_Civilian_Populations_on_War_Fallouts_and_Climate_Change_1

Views: 623

A Numerical Analysis of the 2024 Election: Was it a Landslide or Rejection?

Let the numbers tell this story:

In 2020, the US population was 331.5 million. Election Turnout was 66.6% of the voting-eligible population, the highest rate for any national election. Joe Biden got 81.28 M; Donald Trump: 74.22 M; Total Votes: 155.5 M

In 2024 the US population was 340.1 million, Population Growth in these four years: 2.5%. Election Turnout was 64.1%. Harris got 75.02 M; Trump: 77.3 M; Total Votes: 152.32 M

Had the 2020 voting pattern continued, the increment of a 2.5% for population growth would yield: Harris: 83.312 M; Trump: 76.07 M. There was an increment of one million votes for Trump, and Harris lost 8 million of the 2020 Biden voters.

According to Gallup, political independents constitute the largest political bloc in the US. In June 2024, 51% of U.S. adults said they were independents, more than the two major parties combined. (<https://lnkd.in/e-zjYBQb>)

Is an increment of one million votes out of 77 million a Trump landslide? Is the loss of 8 million out of 81 million a rejection of the Democratic candidate? Some possible reasons for rejecting Harris: Inflation? Immigration? Socio-economic policies? Biden's reluctance to withdraw? Anointing a successor? Gaza? A Combination? (different constituencies may have different reasons). Other? Why are there more independent than total party-affiliated voters? What are the voting alternatives for "Independents"?

These questions intend to elicit a "food for thought" exercise. Keep safe.

Views: 426

About the ASA responsibilities as a member of the American Civil Society (ASA Communities)

As every other professional organization, the ASA is a member of the American Civil Society. As such, it has the right and responsibility to react to issues that touches it, and to issues about which it has relevant knowledge and experience. The restrictions on foreign students access to American higher education, currently being considered, is undoubtedly one of these.

Many ASA members, like me, have come to the US, and have pursued doctorates. Then we have taught and researched in American universities and labs, thus enriching its economy. The ASA has had several presidents and board members who are foreign born, and the same occurs for many, if not all, other professional organizations. A significant number of American Nobel Prizes have been won (https://en.wikipedia.org/wiki/List_of_American_Nobel_laureates) by foreign born American researchers. And we have taught thousands and thousands of American graduate and undergraduate students.

Curtailling the access of foreign students to American universities will not hurt them, for good students are welcome everywhere. To be sure, European, Canadian, Australian, New Zealand, and institutions of other countries will be, both, happy to receive them, and happy not to have to compete with the US for their recruitment. It is the US and its science, that will suffer.

This is not a Democrat or Republican issue; but a National issue. Results of its implementation will be felt twenty years from now, when it will be too late to do anything about it.

It is, therefore, the right and the responsibility of the American Statistical Association, to speak about this issue, and to bring it up with our sister professional organizations.

A Tutorial on Quality Engineering Methods to Mitigate Floods and Droughts

Recently, devastating floods have occurred in northern Italy, Valencia/Spain, and other European countries -as well as in India, Asia and Africa. In addition, countries in tropical climates, such as my native Cuba, exhibit yearly dry and rainy seasons, with frequent spells of floods followed by prolonged droughts. In this tutorial we discuss the application of statistics-based engineering and operations research methods to the design, development and improvement of systems that mitigate the ill-effects of said yearly cycles. The tutorial is based on our Quality Engineering Syracuse University graduate course: <https://ecs.syr.edu/faculty/romeu/MFE634SylS25.pdf> . It may provide useful ideas and a framework, to those working on these issues. Find it in: https://www.researchgate.net/publication/391657205_A_Tutorial_on_Quality_Engineering_Methods_to_Mitigate_Yearly_Drought_and_Flood_Cycles_in_Tropical_Climates

Views: 1110

About the Far-reaching Scope of the Cinco de Mayo Anniversary

On the Fifth of May 1862, the Mexican forces commanded by General Ignacio Zaragoza routed the invading French army in the Battle of Puebla https://en.wikipedia.org/wiki/Battle_of_Puebla. Many miss the larger scope of such important event, that enabled Mexicans to defeat the French invasion, thus keeping them out of the American continent. Had the French won said war, and Emperor Maximilian had ruled Mexico, it is likely France had then supported the South in the American Civil War, whose results could have been very different. The French, and many other countries in Europe, would have then divided Latin America among themselves, as they did with Africa in the Berlin Conference of 1885 (https://en.wikipedia.org/wiki/Berlin_Conference). And the history of the world would have been very different from what it now is.

Views: 507

About the Possible Reshoring of the American Industrial Base

There is much talk, these days, about Reshoring the American Industrial Base, indeed a complex endeavor. Quality Engineering (QE) may be useful in achieving more efficient implementations of these efforts. A group of Syracuse University's QE graduate course (MFE634) students have studied, under my guidance, this challenging problem using QE Six Sigma and Lean approaches. You can find their study group Final Project PPT, that illustrates their excellent technical level, and that may provide insight and useful ideas to apply to the study of this complex problem, in <https://web.cortland.edu/matresearch/ReshoringFinPresentat2016.pdf>

Views: 1001

On the Fifth Anniversary of the Beginning of the Covid-19 Pandemic

Five years ago, millions of people started dying from Covid-19, a new and unknown virus that nobody really understood, or knew how to treat. The first solution, to diminish transmission, was isolation. Syracuse University, like so many others, went Distance Learning. For the next two years I taught my courses from home, via Zoom. Our medium-size rural city of overwhelmingly well separated individual dwellings, fared better than the overcrowded, large urban ones. We all thought we would die! The only way I could help was by writing and publishing in the web, for free access, statistical tutorials analyzing Covid data. Later, some were presented at conferences or published in journals. But we survived! If you are interested in reading some, a summary is in https://www.researchgate.net/publication/349008991_Commented_Summary_of_a_Year_of_Work_in_Covid-19_Statistical_Modeling

Views: 433

About Abolishing American International Aid to Global South Countries.

There is a lot of talk, these days, about dismantling USAid and other US government organizations that help Third World countries. Between this proposal, and the one that moves Palestinians out of Gaza, we are not going to have many friends left in the Global South (and maybe even in the Global North). International Aid to Third World countries has been one of the

most efficient foreign policy tools, sometimes referred to as "soft power". USAid, and the Fulbright Program (in which I have collaborated for many years) are two very efficient examples. I am providing here a final report of work done, which concludes that "the cost-effectiveness of this Fulbright Speaker Specialist Grant is obtained by dividing the cost of sending us abroad, by the number of students our Project will impact. The final cost per individual benefit, i.e. teachers trained, comes out to less than \$1.00/per attendee!". Find the report in <https://web.cortland.edu/matresearch/FulbUVRpt2003.pdf>

Views: 1475

ASQ/RRD Webinar on "Modeling Systems Using Markov Chains".

The Reliability and Risk Division of the American Society for Quality (ASQ/RRD), will present, on February 11 at noon, the talk "Modeling Systems Using Markov Chains". This Webinar (in Spanish) will be given by Prof. Jorge L. Romeu, Dpt. MAE, Syracuse University, and Emeritus SUNY, as part of ASQ Spanish Webinar Series, mainly intended for its Latin American division members. Romeu is a Past ASQ Regional Director (for Region II, NY & PA), with certifications in Quality and in Reliability, and a former Senior Engineer of IIT Research Institute (IITRI), that operated the Reliability Analysis Center (RAC). A PPT of a previous ASQ/RRD Webinar on this same topic, in English, can be found in:

<https://web.cortland.edu/matresearch/ASQRDTalkStochasticJune2024.pdf>

Views: 329

The Juarez Lincoln Marti Internat'l. Ed. Project celebrated 30 Years of work.

The JLM International Education Project, founded in 1994, supports higher education in Ibero-America. It develops programs such as Annual Educator (<https://lnkd.in/eFJuJ-dW>) Awards, donation of books and materials, finding scholarships in the US, and an internet Quarterly Bulletin. More information about it, in the report https://lnkd.in/eXJdN_sh or in the Power Point <https://lnkd.in/eCMwEPmF>

Views: 217

Quality Engineering helping mitigate the deadly fires in Los Angeles

We are following with distress the terrible wild fires taking place around Los Angeles, CA. Students in our Syracuse U. "Quality and Productivity Engineering (QE)" grad course developed, under my guidance, a final project for a similar situation, in Australia, in 2019. QE has much to offer to help organize efforts to mitigate such disasters. Students' final presentation may provide useful ideas and a framework, to those working on such matters. You can find it in:

<https://web.cortland.edu/matresearch/G1BushFireFinalS2020.pdf>

Views: 451

The Juarez Lincoln Marti (JLM) Int'l Ed Project 2024 Educator of the Year Award

Dr. Liliana M. Tauber, (<https://lnkd.in/gE7bYAha>), Facultad de Humanidades y Ciencias de la Universidad Nacional del Litoral, Santa Fe, Argentina, is the 2024 Educator of the Year Awardee of the JLM International Education Project (<https://lnkd.in/eh5zVJY>). Congratulations! More details (in Spanish) are in (<https://lnkd.in/g982ycyt>) and a list of past Project awardees are in (<https://lnkd.in/ezs2Gj-N>).

Views:.418

Statistical Comments on Electoral Results v. Poll Forecasts

Election results just came in. Trump won decisively: his victory was announced in early hours of the morning and he even won the popular vote! During the past month, voter intention polls were reporting ties in all seven Key states most of which Trump won. How could have surveys been so wrong again? There are several technical reasons, for it. First, the “demonization” of candidates who were called “communists”, “fascists”, etc. Second, according to Siena/NYT poll, “dislike of opposing candidate” was a significant reason for voting. Most meaningful was the “Chamorro” (<https://www.linkedin.com/feed/update/urn:li:activity:7251014273013805056/>) polling effect, whereby some voters that support a given candidate, that has been demonized and is selected due to disliking the other one more, would not participate in, or just lie to, political surveys. Thence, poll results were neither statistically valid (a biased drop of the sample), nor realistically useful. So, either our politicians discontinue vilifying their opponents, which is both, bad for the country and for statistical surveys, or we simply kiss away undertaking future polls as a useless endeavor.

Views: 965

Pre-electoral reflections

During the past two months, we have witnessed a growing toxic political environment. Accusations, name-calling, insults and the use of four-letter words, proliferate. I am old enough to remember a time when politicians of different persuasions were not enemies, but contenders, and their political programs were not national threats, but proposed solutions to our national problems. Politicians included, in their political ads, their party affiliation and their positions regarding key issues. The media had two separate sections: news and opinion. And outstanding journalists, such as Cronkite, McNeil, and Lehrer, educated their audiences about the important topics, instead of increasing their divisions. We need to actively promote love of country and a reasoned partisan politics, if we want to preserve our democratic system. May God preserve the United States of America.

Views: 325

The “Violeta Chamorro” Effect in Political Surveys.

Sometimes, political opponents, the Media and/or celebrities portray very negatively contenders, candidates or political parties, using unfavorable comments or misrepresentations. Such negative portrayal may cause voters who support said candidates or parties, to conceal their support, or to refuse to participate in surveys, to avoid being "socially rejected ", or to suffer other types of inconveniences. These reactions produce a distorting effect on survey results, which are based on the total freedom of expression of sample subjects, usually decreasing the apparent support for said candidate or party. This creates a bias that is not always accounted for by pollsters, and that we may call the "**Violeta Chamorro Effect**".

Let's present a real-life example of the statistical consequences of said *Violeta Chamorro Effect*.

In the Nicaraguan presidential campaign of 1990, doña Violeta Chamorro, the widow of a well-known journalist murdered during the Somoza regime, was running against the incumbent Sandinista president Daniel Ortega, who headed the leftist, revolutionary government. The opposition party *UNO*, a coalition of fourteen groups across all political persuasions, campaigned on improving Nicaragua's economic downfall by supporting free enterprise, and ending the civil war between the government and the Contra Guerrillas. The Sandinistas accused doña Violeta of trying to reverse the revolution, by restoring capitalism and Nicaragua's dependance on the United States. Some voters may have not preferred either candidate particularly, but selected, between the only two realistic choices available, the candidate they disliked the least.

A poll taken at the time showed three times as many people supporting the Sandinistas (28%) than all of the opposition parties (9%). However, 59% did not identify with any political party. Thence, many, including the Ortega government, thought that the Sandinistas would win the election. To most everyone's surprise, the election was won by Mrs. Chamorro, who received 55% of the vote, to 41% for Ortega. How and why were these surveys ever so wrong?

Perhaps the social pressure that existed at the time can explain this. Some Nicaraguan voters may have been concerned about the possible social and political implications of stating that they were supporting the opposition UNO and the Chamorro candidate. So, they lied to the pollsters, or just decided not to participate in the survey. In both cases, their action biased the poll results.

However, once inside the voting booth, they may vote differently than expressed in the polls. In a very close election, where such voters may represent 1% of the electorate, they may well decide the final result. And political surveys will have had very little, if any, real value. See more in:

https://en.wikipedia.org/wiki/National_Opposition_Union

<https://www.linkedin.com/feed/update/urn:li:activity:7243766222251528192/>

Views: 589

Quality Engineering Helping Mitigate the Effects of Hurricanes and Floods

This week we have seen the devastation caused by hurricane Helene in several southern states. We present again a report on how QE methodologies are effective in designing, implementing, streamlining and becoming excellent mitigation and control measures, using as examples several large hurricanes in Louisiana, New York, Houston, Puerto Rico, and North Carolina. We hope it helps local and national authorities widen their pool of technical ideas and methodologies to help mitigate the disastrous effect of these natural disasters. See the report in:

https://www.researchgate.net/publication/354322771_Quality_Engineering_Methodology_in_Hurricane_Mitigation_Procedures

Views: 614

Presidential Politics, Electoral Polls and Statistics

For the past few weeks, we have been again bombarded by media Electoral Poll results, that state that this or that candidate is ahead (or behind), by one, two or three percentage points. This is especially important in the seven crucial battleground states that will decide the US election. However, the Media seldom discloses the poll's "margin of error", which is usually larger than the stated differences. And, whenever the difference between two vote intention percentages is less than the poll margin of error, the poll result is a "statistical tie", meaning that the poll is unable to distinguish who is ahead. Such incorrect statements have at least two serious consequences. First, some potential electors may decide not to vote, thinking that their candidate is already ahead or behind, and that his or her vote is not going to be influential. But worse yet, the electorate may expect, based on such incorrect poll result interpretations, that their preferred candidate will win (or lose) the election. And if the opposite result occurs, voters may be prompted to believe that there has been foul play, thus raising the risk of a violent reaction. For a non-technical discussion on how to correctly interpret Electoral Poll results, see:

https://www.researchgate.net/publication/344730261_Electoral_Polls_and_Statistical_Confidence

Views: 878

About Engineering and Polio Vaccination Procedures.

There is good news, regarding the possibility of the massive vaccination of children in Gaza, to prevent a Polio outbreak. Quality Engineering may be useful in achieving more efficient implementations of these efforts. A summary paper on similar vaccine deployment efforts, during the Covid-19 vaccination campaign, is found in <https://lnkd.in/dm6HhtF> And a paper on Markov Modelling of said efforts, to quantify and assess the different patterns of vaccination, something that may affect achieving Herd Immunity, is found in <https://lnkd.in/eM8HFeF>

Views: 793

Quality Engineering Helping Civilian Populations on War Fallouts and Climate Change:

We discuss and describe the application of statistics-based quality engineering methods such as reliability, logistics, industrial and systems engineering, and operations research to the design,

development and improvement of systems that mitigate war fallouts on civilians trapped in closed war zones, and the effects of Climate Change. We provide examples of such implementation in the current war in Gaza, developed under our guidance by Syracuse University graduate engineering students. We expect, with this paper, to contribute to the War Relief efforts. Find the paper in: <https://lnkd.in/e-DUKwmG>

Views: 1732

Media Bias or Incompetence?

France's Second Round of election results, published yesterday, show how National Front and Macron's Centrist blocks obtained a majority and LePen's group ran third. This is the result of the first two groups' political agreement to run a single candidate per electoral circumscription. Most media do not publish percent voting results per political block, only the number of elected officers. Said percentage of votes, taken from the NYT, is given below:

Political Group Percent of votes:

New Popular Front (NFP): 26.9%¹⁷⁸

Macron + Allies (Ens.): 22.3¹⁵⁰

National Rally + Allies (RN): 37.3¹⁴²

The Republicans (LR): 5.1³⁹

Notice how National Rally (LePen's) obtained the most votes (37%) in this election. Combining the results of NFP (27%) + Macron (22%) = 49% > 37%, explains why RN obtained the least number of parliamentarians.

This Post does not pretend to support or oppose any particular group; but it does intend to signal out some current problems that the media exhibits. The objective of my Post was to assess the Media through an example: the reporting of the Second Round of the French Election. When we go to court we swear to state: "the truth, the whole truth, and nothing but the truth". Here, it is true that the Popular Front got the most parliament seats, followed by Macron's Center, and finally, LePen's RN group. But it is not the whole truth. This outcome was the result of the Popular Front and Macron's Center political pact to join forces against LePen's RN group, who did get the largest percentage of the popular vote (37%, vs. 27% and 22% of the two others). Keeping this important fact out of the report may create a serious misrepresentation. Finally, opinions are not part of the truth. We all have one, and that is OK. I am old enough to remember the time when Walter Cronkite, Robert McNeil, and Jim Lehrer reported the news. Then, it was well established that Media was divided into two disjoint houses: news and opinion. Today, that is no longer true. With our Post we wanted to point out this important issue.

Views: 1255

Mexico, seen through Cuban Eyes.

This weekend, Mexico elected its first woman president. Exactly thirty years ago this month, I finished a six-month stint as a Fulbright Scholar, teaching statistics at ITAM University, in Mexico City. While there, I wrote a series of articles about this wonderful country. They were

published in English, in the Syracuse Post Standard (<https://lnkd.in/eqUafJZB>), and in Spanish, in Excelsior, of Mexico City, and in El Nuevo Herald, of Miami FL (<https://lnkd.in/eA9MiTXK>). Maybe these articles will help those who haven't visited Mexico, to understand it better. Enjoy!

Views: 1406

Educator of the Year Award from the Juarez Lincoln Marti Int'l Ed Project:

Professor Soledad Estrella, of the Universidad Católica de Valparaíso, Chile. is the 2023 Educator of the Year Awardee, selected by the Juarez Lincoln Marti International Education Project. Our Warmest Congratulations! You can read her achievements in the JLM Project December Electronic Bulletin (in Spanish): <https://lnkd.in/esMWXsCr>

Views: 1387

Quality Engineering Tools for Mitigation of War Fallouts on Civilian Populations

This paper describes the application of statistics-based quality engineering methods such as: reliability and logistics, industrial and systems engineering, and operations research to the design, development and improvement of systems for the evacuation of civilians out of the war zones, and for the transport of agricultural production, crucial to people in Third World countries, through said war zone. As implementation example, we use the current war in Ukraine. Read said paper in: <https://lnkd.in/e2qyGyCs>

Views: 2192

About the terrible Earthquake that occurred in Turkey and Syria

Our hearts go out (and our contribution to the Red Cross) for the thousands who perished, and the thousands more who are injured and now homeless, in Turkey and Syria. We are offering a technical tool that may help in dealing with the wake of the earthquake, and with the prevention and mitigation of future disasters: the Quality Engineering framework. This QE project was developed by SU graduate students under our direction. It does not deal on earth quakes, but on a similar telluric phenomenon: volcano eruptions. We hope it may provide useful ideas to those physically present, who can actually do something to help. Please find the project PPT in

Views: 2003

Regarding Mud Slides and Bush Fires in Latin America

Quality Engineering provides an excellent analysis framework to help develop mitigation and prevention projects. For our Latin American brothers from Peru, who are experimenting Mud Slides, a Final Project PPT, developed by my Syracuse U. Quality Engineering graduate students, under my direction: <https://lnkd.in/en3sccDU> and for our brothers from Chile, who are experimenting Bush Fires, another Final Project PPT, developed by my Syracuse U. Quality Engineering graduate students, under my direction: <https://lnkd.in/eap5yzHB> With Best Wishes/Proyecto Juarez Lincoln Marti de Educacion In'tl.

Views: 1675

The Annual Award to the Educator, of the Juarez Lincoln Marti Int'l Ed. Project
(<https://lnkd.in/eh5zVJY>), was given to the organizers of ICOTS-11, the 11th Internat'l Conference on Statistical Education, that took place in Rosario, Argentina, on September 2022. The award was established to recognize Ibero-American Educators for work in International Education. A list of awardees and their work is in: <https://lnkd.in/ezs2Gj-N>.

Views: 504

Juarez Lincoln Marti Education Project Annual Educator's Award

The JLM Int'l Education Project (<https://lnkd.in/eh5zVJY>) gives an Annual Award for International Education. The 2022 Award was granted to the organizers of the ICOTS-11 International Conference (<https://icots.info/11/>) that took place in Rosario, Argentina, in September. The list of all JLM Project awardees throughout the years, can be found in: <https://lnkd.in/ezs2Gj-N> This information was initially posted last Friday, but it disappeared. Here it is again, for those who missed it. Have a Happy Holiday and keep safe.

Views: 1199

Updated: August 6, 2025.