

SCASA Events and News E-Tidings Newsletter



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2022 International Science and Engineering Fair

ASA Special Awards in Statistics and Data

INVITATION TO JUDGE!

SIGN UP SOON! HARD AND FAST DEADLINE FOR ISEF BACKGROUND CHECK IS APRIL 1

Please go to <https://bit.ly/ISEF2022StatJudges> to sign up.

Regeneron ISEF 2022 will have nearly 2,000 finalists from more than 80 countries with science projects in 21 different categories. The ASA Council of Chapters has sponsored the Special Awards in Statistics since 1987. These students are so brilliant and so smart it is amazing to see what they are doing! The projects are cutting edge. In the 75+ years of ISEF, over one dozen Grand Awards winners have gone on to win Nobel prizes. Their enthusiasm is contagious!

Who: Atlanta statistics judges are looking for enthusiastic statisticians to volunteer as judges.

The Society for Science & the Public requires that judges have either a Ph.D. in Statistics or a related field, or a Master's degree and 6 years or more experience in Statistics or a related field.

Where: In 2022, the competition will take place **virtually** in order to keep the finalists, volunteers, judges and staff safe during the ongoing coronavirus pandemic.

The Good News: No Traffic!!! No long walking between projects!! More time to meet for coffee!

The Bad News: There won't be an in-person ASA-hosted dinner for the statistics judges.

What's New? Virtual Coffee Hours and Happy Hours with breakout rooms!

When: **** Alert!! Dates Changed!! ****

April 28-30: Round 1 Screen all 1800+ projects; Round 2 Review ~ 150 projects selected in Round 1

May 2: Arrange Virtual Interview Appointments for top 10-15 projects

May 1-2: Interview Judges Pre-review Projects Scheduled for Interviews

May 2-5,9: Round 3: Interview ~10-15 Projects selected in Round 2

You can participate in all 3 rounds or select just the round(s) that work for you.

You do not need to participate every day; select just the days that fit your schedule.

You do not need to participate all day; select just the times that fit your schedule.

SIGN UP SOON! HARD AND FAST DEADLINE FOR ISEF BACKGROUND CHECK IS APRIL 1

Sign up: <https://bit.ly/ISEF2022StatJudges> Questions? Please contact madeline_bauer@earthlink.net

POST-EVENT REPORT

The logo for the Job Fair, featuring the words "JOB Fair" in a stylized, blocky font. The letters are white with a purple outline, set against a purple background with a starburst effect.

On Friday, February 25, 2022, SCASA held its 2nd Annual Virtual Job Fair. There were a total of 40 attendees, including students from UCI, USC, UCLA, Cal Poly, Pomona, and CSULB, and representatives of four companies: Disney, Urgently, Optum, and System.

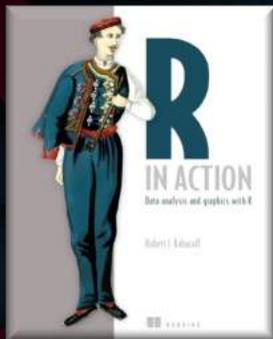
The attendees registered on Eventbrite.com and the small income that was generated will be spent on thank-you cards for the companies.

SCASA would like to extend our gratitude to **Neal Fultz**, our *VP for Professional Affairs*, for his incredible work as a sole organizer of this event. Thank you, Neal, for making the Job Fair a growing success !



As this event is gaining momentum, please consider serving on the organizing committee next year.

Please contact Neal at neal@njnm.co with nominations/suggestions/positive remarks.



SCASA 41ST ANNUAL (VIRTUAL) APPLIED STATISTICS WORKSHOP

SATURDAY, APRIL 23, 2022
9 AM - 4 PM

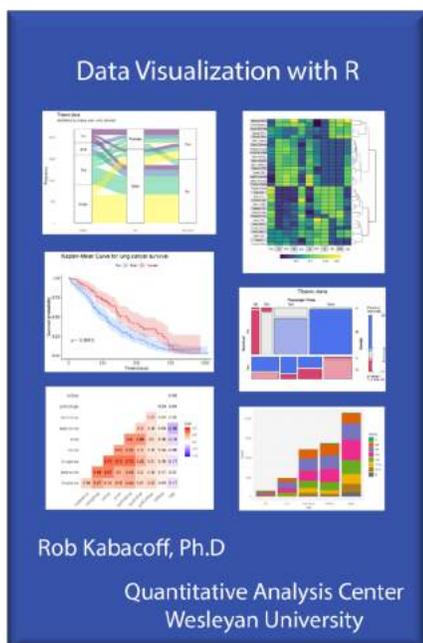
SCASA is happy to announce that our 41st annual Applied Statistics Workshop will take place on Saturday, April 23, 2022, via Zoom. It will be a free event, and registration is not required. We need a big turnout, so please help to spread the word.

TOPIC: DATA VISUALIZATION WITH R

PRESENTER: DR. ROBERT KABACOFF,
Professor of the Practice in Quantitative
Analysis, at Wesleyan University, Connecticut



About the Presenter: Dr. Kabacoff received a B.S. degree in Psychology from the University of Connecticut, and a Ph.D. in Clinical Psychology from the University of Missouri - St. Louis. He held a postdoctoral fellowship at Brown University Medical School. At Wesleyan University he teaches courses in applied data analysis, machine learning, pattern recognition, data journalism, and statistical software development. Dr. Kabacoff is a data scientist with more than 30 years of experience in multivariate statistical methods, data visualization, predictive analytics, and psychometrics. A widely recognized expert in statistical programming, he is the author of three books: *R in Action: Data Analysis and Graphics with R*, *Data Visualization with R* (an open source textbook), and *Evaluating Research Articles From Start to Finish*. He is also a founder of a popular website called *Quick-R*, for rapidly learning the R language.



More information will be posted on our website <https://community.amstat.org/scasa/home> within the next couple of weeks. Abstract, schedule, Zoom link, and all supporting R files will be available for download. An additional email will go out closer to the date.

Virtual ASA Traveling Half-Day Course October 22, 2022, 10AM-1PM



SCASA is pleased to announce that we had been awarded a traveling course this year! Please mark your calendars. More information will be posted closer to the date of the event.



An Introduction to Second-generation p -values and their Use in Statistical Practice

Instructors: *Jeffrey D. Blume, School of Data Science, University of Virginia, and Megan H. Murray, Biostatistics, Vanderbilt University*



Abstract

Second-generation p -values were recently proposed to address the well-known imperfections of classical p -values. Their implementation can largely be thought of as codifying 'good standard practice' for interpreting and reporting classical p -values. Second-generation p -values maintain the favorable properties of classical p -values while emphasizing scientific relevance to expand their utility, functionality, and applicability. In particular, they can report evidence in favor of the alternative, in favor of the null hypothesis, or neither (inconclusive); they automatically incorporate an adjustment for multiple comparisons and multiple looks; they have lower false discovery rates than classical p -values; and they are easier to interpret. Second-generation p -values have been shown to work well in regularized models. They also lead to significantly improved model selection procedures in linear and generalized linear models. Also, second-generation p -values are non-denominational in the sense that they are readily applied in frequentist, likelihood and Bayesian settings. This course will briefly revisit the history of p -values as originally envisioned in significance and hypothesis testing, and the resulting controversy over their scientific interpretation. The importance of distinguishing between three key inferential quantities (the measure of the strength of evidence, design error rates, and false discovery rates for observed data) will be illustrated. The second-generation p -value will be introduced and contrasted with standard methods. The workshop will explain how to design studies in which the second-generation p -value is used as the primary mode of inference. We will cover computation of second-generation p -values (in R), guidelines for presenting results, and when appropriate, how to present accompanying false discovery rates. Multiple examples will be presented using data from clinical trials, observations studies and high-dimensional analysis of large-scale data. Advanced applications in model selection, adaptive monitoring of clinical trials, and regularized models will be shown if time allows. Mathematical details will be kept to a minimum, e.g., statistical properties will be presented but without mathematical proof.

About the Instructors

JEFFREY D. BLUME, PH.D. is the Quantitative Foundation Associate Dean for Academic and Faculty Affairs and Professor of Data Science at the School of Data Science at the University of Virginia. He recently moved from Vanderbilt University where he served as Vice-Chair for Education in the Department of Biostatistics and Director of Graduate Education in the Data Science Institute. Professor Blume is a fellow of the American Statistical Association and has extensive experience in the operation, analysis, and methodological aspects of Clinical Trials and in the analysis of a wide array of biomedical research. He has won numerous awards for his teaching and mentoring, and for his work on racial disparities in lung cancer screening. His statistical research focuses on the foundations of statistical inference, mediation modeling, diagnostic clinical trials and prediction modeling. Professor Blume has published extensively on the foundations of statistical inference, particularly on likelihood methods for measuring statistical evidence, and he authored the origin publications on second-generation p -values.

MEGAN H. MURRAY is a Ph.D. candidate in Biostatistics at Vanderbilt University working with Professor Blume. Her methods research focuses on evaluating and extending the statistical properties of second-generation p -values and on characterizing false discovery rate methodology. She recently co-authored a paper describing her development of an R package ("FDRestimation") for computing, estimating, and visualizing false discovery rates (currently on CRAN). Her biomedical research has focused on the areas of lung cancer, particularly in assessing racial disparities in lung cancer diagnosis, and of graduate student survey data, specifically evaluating if a positive mentor experience leads to more published papers or a shorter time to graduation. Megan has won several teaching awards in both Biostatistics and Data Science at Vanderbilt.

CDISC Compliance Checks Beyond Pinnacle 21 (Clinical Data Interchange Standards Consortium) [NEW WEBINAR]

March 29, 2022 | 11:00am EDT /
8:00am PDT / 17:00 CEST
Online Live



Tuition

	Registration
Early Bird Rate*:	\$265
Regular Rate:	\$295

***Early Bird Rate Tuition:** Must register and pay by Wednesday, March 16, 2022.

<https://www.cfpa.com/CourseDescription/CourseDescription/2203901OL3042/3042>

Course Director



Sunil Gupta, UCLA, UCSD Extension Professor

Sunil Gupta, MS, is an international speaker, best-selling author of five SAS books, and a global SAS and CDISC corporate trainer. Sunil has over twenty-five years of experience in the pharmaceutical industry. Most recently, Sunil is teaching a CDISC online class at the University of California at San Diego and classes on Data Science using SAS at UCLA and UCSD Extension. In 2019, Sunil published his fifth book, Clinical Data Quality Checks for CDISC Compliance Using SAS and in 2011, Sunil launched his unique SAS mentoring blog, SASSavvy.com, for smarter SAS searches. Sunil has an MS in Bioengineering from Clemson University and a BS in Applied Mathematics from the College of Charleston.

Who Should Attend?

This 90-minute introductory webinar has been designed for professionals in the Life Science industry including those involved in the pharmaceutical, medical device, clinical and pre-clinical areas. Those working in Validation and Regulatory/Compliance will benefit greatly from this training.

Including:

- SAS Statistical Programmers
- Quality Assurance Specialists
- SAS Statistical Managers
- Medical Writers
- Statisticians
- Regulatory Affairs Associates
- Clinical Data Managers
- Directors, Statistical Programming
- CRO Professionals
- Health Care Professionals
- Research University Specialists





<http://datafest.stat.ucla.edu/>

We are proud to introduce ASA DataFest 2022 at UCLA, an annual data hackathon sponsored by the American Statistical Association (ASA), will be back in person at UCLA on April 29, 2022 through May 1, 2022 in Ackerman Grand Ballroom! Students from all over the country come together to explore the best insights gleaned from a large, complex dataset. We are celebrating the 11th anniversary of ASA DataFest this year and would love for you to join us as a mentor! ASA DataFest at UCLA gathers 400 students and 100+ mentors each year!

This year we are looking for both in-person and virtual mentors. In-person mentors will be asked to join us in person for a couple of hours throughout the weekend to offer advice to the students and virtual mentors will be asked to hold zoom office hours during the event weekend where students can ask questions. If you are interested in joining ASA DataFest as a mentor (in-person or virtually), please sign up here <https://forms.gle/U3rbbEeFU5BJ2izj6>.

Please consider a financial contribution and, in particular, asking **your employer to contribute**.

If you are interested in becoming a sponsor of ASA DataFest, please visit giving.ucla.edu/DataFest.

We will happily take swag contributions! Pens, thumb drives, notepads, water bottles, etc. The students love these, they help make the event fun, and this puts your logo front and center. If you have any questions, please email Linda Zanontian linda@stat.ucla.edu or ucladatafest@gmail.com.

**CELEBRATING
OUR 11TH
ANNUAL...**



datafest
@ucla

**04.29.22-
05.01.22**



ASA DataFest at UCLA



@UCLAdatafest



datafest.stat.ucla.edu



datafestUCLA

Ackerman Grand Ballroom

The Floor is Yours!

Interviewed by Jennifer Lee

Interview with Michael Tsiang



This month's star is SCASA's own Secretary, Michael Tsiang. Michael is currently a Lecturer at UCLA's Statistics Department. He received his Ph.D. from Stanford in 2016 where he applied statistical theories to Environmental Science. In 2020, he founded The Michael Tsiang Fund for Belonging in Statistics, which he discusses in this interview.

Michael's journey into the statistics field is unique, showing us that statistics can be used and applied to so many different areas as well as showing us the beginning does not always portend the end. I hope those who read this interview can see his passion for statistics as well as his "pay it forward" attitude. *[Ed Note: Some questions were edited for clarity]*

Hi Michael, thank you for doing this interview. I want to begin by asking about your time at SCASA. When did you join SCASA?

I joined SCASA in 2016, so I've been with SCASA for a little over five years.

That's great. What was your initial reason for joining SCASA?

I had just finished my Ph.D. and started my position as a lecturer at UCLA, and I wanted to be more involved and connected to the greater statistics community. I felt that engaging with the local statistics community was important in my development as a statistician and as a teacher.

I agree that SCASA is a great way to meet more people in the statistics community. As Secretary of SCASA, what do you enjoy the most about being Secretary?

I [had] nominated myself at my first kick-off meeting in 2016, so I have been Secretary for about five years so far. I've always naturally enjoyed documenting social events with my friends and family, usually through taking a lot of pictures, so I enjoy documenting our events as well, both through text and photography.

Continued on the next page.

Interviewed by Jennifer Lee

Continued from the previous page.

I can't wait to see your pictures on the SCASA website when in-person events are back. That said, what has been your general experience with SCASA?

The SCASA community that regularly engages is small but very passionate and welcoming. We always get great guest speakers with interesting talks, and the leadership is always engaged in service to the community.

The guest speakers are absolutely phenomenal. What has been your favorite SCASA event and why?

My favorite SCASA event was the Kick-Off event from a few years ago when we had guest [speaker] [...] Dean Sastry Pantula, Dean of Natural Sciences at CSU San Bernardino. His contributions to diversity, equity, and inclusion in Statistics and the STEM community were inspiring and deeply motivating. I recall that he advised us to encourage diversity and be an "outstanding citizen" in my department. His words and sentiments have stayed with me ever since.

Those are some powerful words. Is there anything you're excited about for SCASA this year?

I always enjoy the Applied Statistics Workshop and the Traveling Course event, because I learn so much. Last year, the Applied Statistics Workshop introduced me to Apache Spark and Databricks, technologies that I have since incorporated into a new course I'm teaching, so I'm excited to learn new things at this year's events.

The workshops that SCASA presents have always been top-notch. I hope more people really tap into that incredible resource. I know I've gotten so much out of them, too. Looking forward, what do you wish to see SCASA do more in the future?

It would be nice to have more undergraduate students (and even graduate students) come to SCASA events. More engagement with students would expand our community and increase interest in our events.

Yes, agreed. I would love to see more involvement with the graduate and undergraduate students around the Southern California campuses. And I hope this interview encourages them to do so!

As a change of pace, I would like for our readers to get to know you a bit more. Tell me, what was your first job out of school?

After my first master's degree (in mathematics), I got a job as a sales floor team member at Target. I made minimum wage and I was only there for six months, but I LOVED it. I found that I loved service jobs, even retail because I enjoy helping people, even on a small level like helping a guest find something in the store. I feel like that same feeling of service and helping people translated into my teaching too.

Continued on the next page.

Interview with Michael Tsiang

Continued from the previous page.

I love your perspective and overall outlook. You are currently a Lecturer at UCLA for the Statistics Department. How did you get into your line of work?

I had several teaching and teaching assistant opportunities throughout my many (many) years as a graduate student, and I noticed that I always gravitated more towards teaching than research. I was fortunate to get my lecturer job with UCLA straight out of my Ph.D. Immediately after my interview, I felt an epiphany that this was the dream job I have been longing for my whole life. I still feel that to this day.

Getting your dream job is everyone's goal, so that's wonderful to hear. What do you love about this dream job?

One of my favorite things about teaching is the student interaction and connection. I love office hours, when I get to help and know my students on a more individual level than in the classroom. I greatly enjoy seeing my students grow, learn, and find a deeper appreciation for statistics. I'm always so proud when my students maintain connections with me after they leave my classes, and they come back and tell me about all they've accomplished. It's a great feeling to be a small part of their journeys.

Another thing I love is the support and camaraderie among the faculty and staff. We all are so passionate about statistics and deeply invested in student learning; I feel like I have found my people.

I always love hearing someone talk about how much they love their job. Where did you get your Ph.D. and what was your research topic?

I did my Ph.D. at Stanford. I was in an interdisciplinary program where I applied and developed modern statistical methods to questions in climate science. My main topic was regarding the so-called "global warming hiatus" of the early 2000s and developing a statistical method to test whether the rate of warming during the hiatus is significantly lower than in the previous period.

You mentioned you received an interdisciplinary Ph.D. at Stanford. What made you decide to get an interdisciplinary degree and were there any challenges in getting a degree, since it was interdisciplinary?

My advisor was jointly appointed in statistics and environmental science, and we felt that I could make a greater impact by bringing more modern statistical methods to earth and environmental sciences than staying in the statistics department. The challenge in getting an interdisciplinary degree was feeling like I wasn't an expert in either field, and I had to learn a lot of domain knowledge that was difficult for me to learn without the foundational courses that my peers had.

Continued on the next page.

Interview by Jennifer Lee

Continued from the previous page.

That is some really interesting insight. I hope more people look into pursuing an interdisciplinary degree where they can apply statistics to different fields, even with the aforementioned challenges. That said, you didn't go straight from your BS to your Ph.D. You did get another MSc at UBC before getting your Ph.D. What was the catalyst for you to switch your focus, if there was any?

I originally started a Ph.D. program at UBC, but I did not have the support from my advisor at the time that I needed to succeed, so I eventually transitioned into the MS program and completed that instead. By taking a break from academia before finding statistics a couple of years later, I gained a better perspective on learning and pursuing my passions that have continued to this day. Even though my experience at UBC was difficult, it gave me strong foundations in mathematical and logical thinking that helped me appreciate statistics even more when I went back to school.

The catalyst [part] is a bit of a long story. When I left UBC with my MSc in Mathematics, I had an existential crisis, since I left with a different degree than what I originally went for. During that time of searching for meaning, I learned probability by studying for the first actuary exam (Exam P), since all my math friends said that being an actuary is the lucrative way to use a math degree. After I learned probability, I started noticing statistics appearing everywhere, so that planted the seed of statistics. When I was at my unfulfilling day job at the time, I wanted to make a change but wasn't sure how. My dad recommended that I go back to school and perhaps try my hand at statistics (because I would tell him my skepticism at the news reports that overstated results from scientific studies), so I sat in on some undergrad statistics classes at UCLA. After one day of classes (my first actual statistics classes, and my first class in R), I quit my job and enrolled full time through UCLA Extension's concurrent enrollment program. The statistics classes at UCLA (in the department I now teach at) were so interesting and motivating after just one day that I had to see where it would take me. I applied to graduate school that quarter, and the rest is history!

Wow, this is an incredible story. With all that, is there any advice you would like to give to students and/or people just beginning their career in statistics?

Grades feel important now, but what ultimately will matter more is your knowledge and understanding. Growth and learning is [sic] always challenging, but lean into the process.

Don't feel bad about taking time to rest and finding a balance between your work and non-work life. Everything is harder when you are physically, mentally, and emotionally drained. Take the time to recharge, and it will make your time working more efficient and productive. My mom always said (in Mandarin) "Resting allows you to go an even longer distance." A quote I put on every syllabus: "We need to remember what's important in life: friends, waffles, work. Or waffles, friends, work. Doesn't matter, but work is third." -- Leslie Knope (from Parks and Recreation).

Continued on the next page.

Interview with Michael Tsiang

Continued from the previous page.

This is really good advice. I know students and recent graduates are constantly worried about the road ahead, and I love your mom's sage advice. In that vein, you have started the Michael Tsiang Fund for Belonging in Statistics. Can you tell us more about it and why this is of importance to you?

I have my dream job. My mom worked at UCLA for 40 years; I grew up here, and it has always felt like home. I love what I do, and I have a department of faculty, staff, alumni, and students who make me feel like I belong every single day. But I've also been in situations where I felt I didn't belong or I felt like a second-class citizen. I know that not everyone feels the sense of belonging in statistics or STEM that I now feel, particularly minority students and faculty. I never want my Statistics Department to make others feel like they do not have a place in it.

I hope that the Fund helps create a safe and supportive community around the many groups that have been historically underrepresented in Statistics: women, people of color, the LGBTQIA+ community, people with disabilities, low-income, and/or first-generation; to address any and all of the invisible ways people can be marginalized and underrepresented.

The Fund will be used to support community inclusivity initiatives and student awards within the department, as well as help cover the costs of lectures, panel discussions, workshops, screenings, research, community outreach, and other activities that will empower and educate our community.

Last year, I was able to reach my fundraising goal of \$100,000 to turn the Fund into a permanent endowment (with 100% matching funds from the Dean of Physical Sciences), to ensure that there are always funds to support diversity, equity, and inclusivity initiatives in perpetuity.

This is really an incredible vision as well as an important one. What are your future plans for the Fund?

The Fund is still in its early stages, so I am still in the process of forming a steering committee to ensure that the funds are used specifically for their intended purpose. I don't have all the ideas just yet, which is partly why the Fund is broadly written by design. I want to make sure to listen to those we hope to help to better understand what is needed and how we can best help build our community. We have the flexibility to support any positive ideas that our community comes up with that encourage more diversity, equity, inclusion, and belonging.

Continued on the next page.

Interview by Jennifer Lee

Continued from the previous page.

Switching gears now, this is a great picture. Can you tell me its significance?

[This is] me at home with one of my favorite shirts ([...]by Ruben Rojas), because it is a very relevant design and message for my Fund.

That's an incredible message. Lastly, what is your favorite restaurant in the LA area and why?

A recent find that immediately became my favorite restaurant is a small local place called *Lobster and Beer*. The restaurant is unassuming, but the food is *incredible* with good portions and reasonable prices (even a happy hour!). I was blown away by the quality that I try to gush about it any chance I get. They recently opened a second location in Santa Monica too! I recommend the lobster and corn chowder and the Connecticut Roll, but literally everything I've had there was top-notch. I might have to go again after just talking about it!

***Lobster and Beer* sounds incredible. Thank you, Michael, for your inspiring interview and for being the Secretary of SCASA. I can't wait to hear an update on The Fund!**

Once again, I huge thank-you to Michael for this fascinating interview. If you're ever in the Palms, or Santa Monica area, definitely give this a try. Their lobster rolls reminded me of when I was at Cape Cod enjoying this on the shore. Their website is <http://www.ilovelobsterandbeer.com>, and I hope you do end up trying this!

A friendly reminder to check our website, <https://community.amstat.org/scasa/home>, for all the upcoming SCASA events. As spring is approaching, I look forward to seeing each and every one of you in one of our events! Until next time!

Do you want to be featured in a future article? Or, do you know someone in SCASA you think should be featured? Email me at SCASA.Interviews@gmail.com

ABOUT THE INTERVIEWER: Jennifer Lee is currently SCASA's VP for Student Affairs. When she isn't busy writing articles for SCASA's eNewsletter, she enjoys getting to know SCASA members, both old and new. Currently, she is working for a gaming company and loves finding ways to utilize her knowledge in both statistics and the law. An avid reader, Jennifer also enjoys discovering hidden gems all around the LA area. Come and say "hi" to her at the next in-person event!



Dr. Normalcurvesarus, Ph.D. Presents



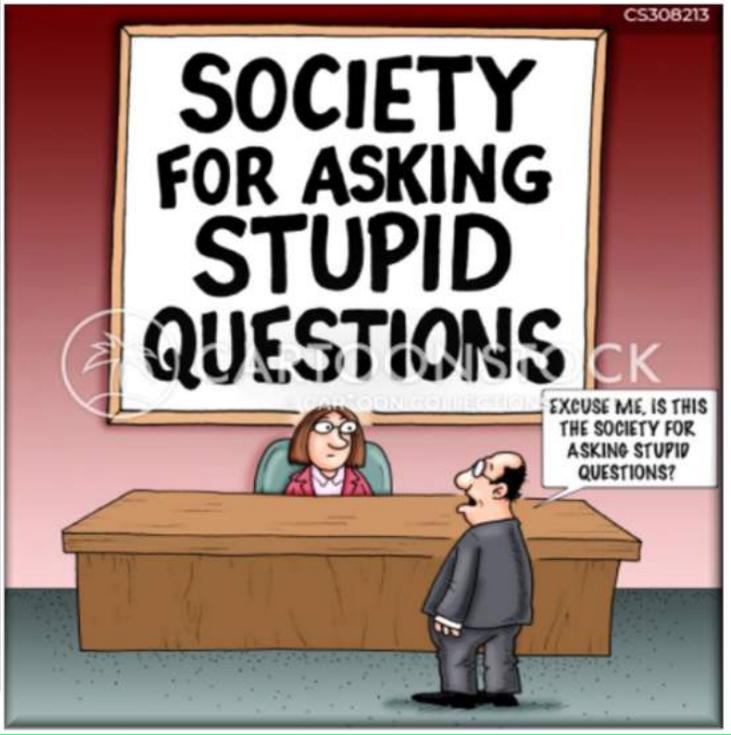
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"Artificial intelligence is when you get a college degree, but you're still stupid when you graduate."



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