

2024 AAVSO Board Candidate Questionnaire

Prajval Shastri

How many years have you been a member of the AAVSO?

I have not been a member of the AAVSO, although I am very familiar with its work.

Why do you want to serve on the AAVSO Board of Directors?

Recently a member who is also my mentee suggested that due to my scientific expertise and experience within the core of my profession as well as outside of it, I might be able to make meaningful contributions to the Board of Directors, which was what impelled me to offer my candidature.

I have followed the track-record of the AAVSO for many decades. I passionately believe that scientific thinking is for everyone and that the sky is everyone's laboratory, and therefore it is only natural that I have been a great admirer of the AAVSO's inclusive efforts towards upholding these values, of involving amateurs and professionals alike, being committed to citizen science and open science, and thus being able to bring the fruits of the rigorous scientific method to anyone interested in its scientific goals.

We are in an era in which variability of stars is key not only to furthering stellar physics per se but also discovering exoplanets. In this context it is relevant to recall that variability interpreted with the light-travel-time argument was key to the discovery of the first black hole many decades ago, by establishing circumstantial evidence for it. Multi-frequency multi-cadence variability studies continue to be an important tool to understand their physics. With new facilities like the Rubin Observatory, complemented by smaller ones, there is much room for cross-fertilization of the many techniques and methodologies that the AAVSO has developed. The potential impact of the work of the AAVSO is thus well beyond just stars, and of course, well beyond America.

What are your current and past contributions to AAVSO?

I have not been involved with the AAVSO so far.

In your opinion, what are the greatest strengths of AAVSO?

The "Science is for Everyone" approach of the AAVSO is its great strength and also a tenet that is close to my heart.

If elected to the Board, how would you help AAVSO translate those strengths into opportunities?

I see an opportunity for a two-way broadening of perspective and I would attempt that if called upon to serve. There is room to broaden the scientific scope of the data, and to increase the reach of the AAVSO both in terms of participation and dissemination of outputs.

On the flip side, there is room to bring the strong ethos of the AAVSO to the larger global professional community as an example of how science can be done in an inclusive fashion within and outside of academic institutions. I think the larger astrophysics and citizen science community has much to draw upon from what the AAVSO does and more importantly, for how it does what it does. I see all of these as exciting possibilities.

In your opinion, what are the greatest weaknesses of AAVSO?

I would need to have more involvement to clearly articulate its weaknesses. I suspect, however, that there is room for more visibility for how the AAVSO does what it does, and also to broaden the base of the AAVSO.

If elected to the Board, how would you help the AAVSO effectively meet those challenges?

I would need more familiarity to articulate specific pathways, but I am confident that the possibilities spelt out above are strong pointers for ways ahead. I also suspect that the modern digital transformation can be leveraged to increase inclusion geographically and on other dimensions as well.

Strategic Planning [Development of vision and mission statements]

Advanced Experience

Strategic Planning [Creation of a strategic plan]

Advanced Experience

Strategic Planning [Identification and ranking of priorities]

Moderate Experience

Strategic Planning [Development of plans to achieve objectives]

Advanced Experience

Please describe one of your greatest accomplishments in strategic planning.

I consider my work to mitigate gender inequity in the physics profession in India as a major accomplishment. This is especially because many of the concepts of equity in the enterprise were new and largely unfamiliar to those in leadership. I led the strategic planning with a clear goal of bringing about a shift from the typical "fixing the women" approach to addressing systemic and institutional barriers to equity. This approach made significant inroads. I led funding proposals that garnered funds (mostly government but some private as well) for the first-of-its-kind national interdisciplinary conference that deliberated physics and processes in physics. There was buy-in from the community, and therefore the launch from the conference of the Hyderabad Charter for Gender Inequity that I took the lead in formulating. It garnered the endorsement of over 550 physicists (PhDs) country-wide. So the approach that I adopted, of visualizing what mindset shift needs to happen in ten

years, and then doing what it took towards that (an on-going effort) has been an accomplishment that I am proud of, given the outcomes that I am already seeing.

Governance and Oversight [Policy development]

Advanced Experience

Governance and Oversight [Financial oversight]

Advanced Experience

Governance and Oversight [Resource development]

Advanced Experience

Governance and Oversight [Program Evaluation]

Advanced Experience

Please describe one of your greatest accomplishments in governance and oversight.

A good example of this is the series of four Astrostatistics schools that I ran for the Indian astrophysics community. The idea was born of identifying a crying need. Implementation involved building a collaboration with Penn State University, forging completely new partnerships with academics from the Indian statistics community, developing resources of theoretical content and hands-on tutorials using astrophysics data, designing a space for focused learning and interaction and the associated logistics, raising funds for the schools and for need-based travel support for participants who ranged from PhD students to faculty, and were mostly from India but also overseas, and finally, implementing feedback from previous schools in a timely fashion. About 130 astrophysicists directly benefitted from this series, and additionally, a digital pedagogical resource with much wider reach was also generated.

Advocacy and Public Relations [Community engagement]

Advanced Experience

Advocacy and Public Relations [Campaigns and initiatives]

Advanced Experience

Advocacy and Public Relations [Spokesperson Role]

Advanced Experience

Advocacy and Public Relations [Event Promotion]

Moderate Experience

Advocacy and Public Relations [Social Media]

Moderate Experience

Advocacy and Public Relations [Storytelling]

Basic Experience

Advocacy and Public Relations [Media Relations]

Basic Experience

Advocacy and Public Relations [Brand Ambassadorship]

Basic Experience

Please describe one of your greatest successes in advocacy or public relations.

Advocacy for gender equity in physics, described above. The idea was new and unfamiliar, and therefore getting buy-in from physicists in leadership positions and from government agencies for funding was a major step. The organization of the first-of-its-kind national conference also involved considerable advocacy because the idea of a physics conference deliberating also on processes within physics was new and unfamiliar. The Hyderabad Charter which emerged needed grassroots level advocacy among practicing physicists to be rendered effective and bring about the mindset change which was the goal. A parallel process of my editing all-women authored science publications for non-specialist audiences caught the imagination of the media, and generated consistent attention. All the above efforts including the Hyderabad Charter for Gender Equity in Physics thus received considerable media publicity.

Fundraising [Managing fundraising efforts]

Moderate Experience

Fundraising [Annual fundraising campaigns]

Moderate Experience

Fundraising [Special capital campaigns]

No Experience

Fundraising [Soliciting sponsors for events, programs, or activities]

Basic Experience

Fundraising [Cultivating donors]

No Experience

Fundraising [Securing grants]

Advanced Experience

Fundraising [Building partnerships]

Advanced Experience

Please describe one of your greatest fundraising accomplishments.

One of my largest fundraising successes has been for a series of collective public engagement activities directed at building scientific thinking among everyone, in a context of a deep societal deficit of scientific thinking, particularly among those with formal tertiary education. First, I co-led multiple initiatives to celebrate the International Year of Astronomy, wherein we built cross-institutional cross-disciplinary partnerships across institutions and disciplines, particularly with school teachers, amateur astronomers, people's science activists, artists, designers, performers, and journalists. These long-lasting partnerships were then harnessed to successfully fund and implement a 10-day public astronomy festival with thousands of participants, which involved resource development in multiple languages, financial oversight, and evaluation. In 2013 I was chair of a national steering committee that drove a national campaign around the arrival of the Comet ISON (called Eyes On ISON) which built upon the earlier partnerships and resource base. I took the lead in first getting government funds for three national-level training workshops spread across the country, and then a much larger quantum, for country-wide workshops down to the district level, with the cascading training-of-trainers approach, especially leveraging the people's science networks. And even though the comet itself was less than spectacular, this move further concretized the networks and partnerships already built and contributed very significantly to capacity building towards scientific awareness among lay audiences that went well beyond the comet.