

The impact of
Co-curricular
activities on
Research and
Holistic Growth

Arpita Patra



CO-CURRICULAR ACTIVITIES

Co-curricular activity means an activity or program that takes place outside of the traditional classroom but in some manner that complements academic learning from classroom curriculum. These activities do not allow for academic credit to be earned (*that's where fun begins!*); however, they provide many advantages to students (*every individual, in fact*); academically and in skill development.

- It's pure *passion* that drives the co-curricular activities.
- It is ALWAYS FUN, and there is NO SINGLE DULL moment.
- Your entire system- *soul, mind, body act in unison with full harmony and synchrony*
- Soul and mind are content and in complete peace

The content state permeates beyond the sessions and the passion carries forward far beyond and impact one academic life including academics

Art (Music, Painting, Photography, Instruments, Dance, Writing), Sports (Athletics (field and track), Swimming, Badminton, Cycling, Skating, tennis, archery...)

MY START

Childhood: My journey began at a remote, rustic and rural village in West Bengal (painting in the first slide). I am eldest of 3 sisters.

Muddy roads, no electricity, mud-built houses, walking to school forefoot, coming home fully drenched wrapping the school bag in a polyethene, swinging in makeshift swings in our bamboo bush, climbing trees, picking green mangoes (relishing with salt/chilly), swimming for hours in our pond; stories from around the world from my baba and mathematics from ma (while she did all house-holds).

What's great: (1) relaxed childhood; (2) home-schooled until class 2 (3) cycling, swimming, climbing tress for FREE (4) fresh food and no junk food

What's not great: NOTHING 😊

Long term effect: (1) A strong foundation for mental and physical health and strength ; (2) birth of an explorer and inquisitive mind

Exposure to co-curricular activities: Music (but I had no genes for Music) AND NOTHING ELSE

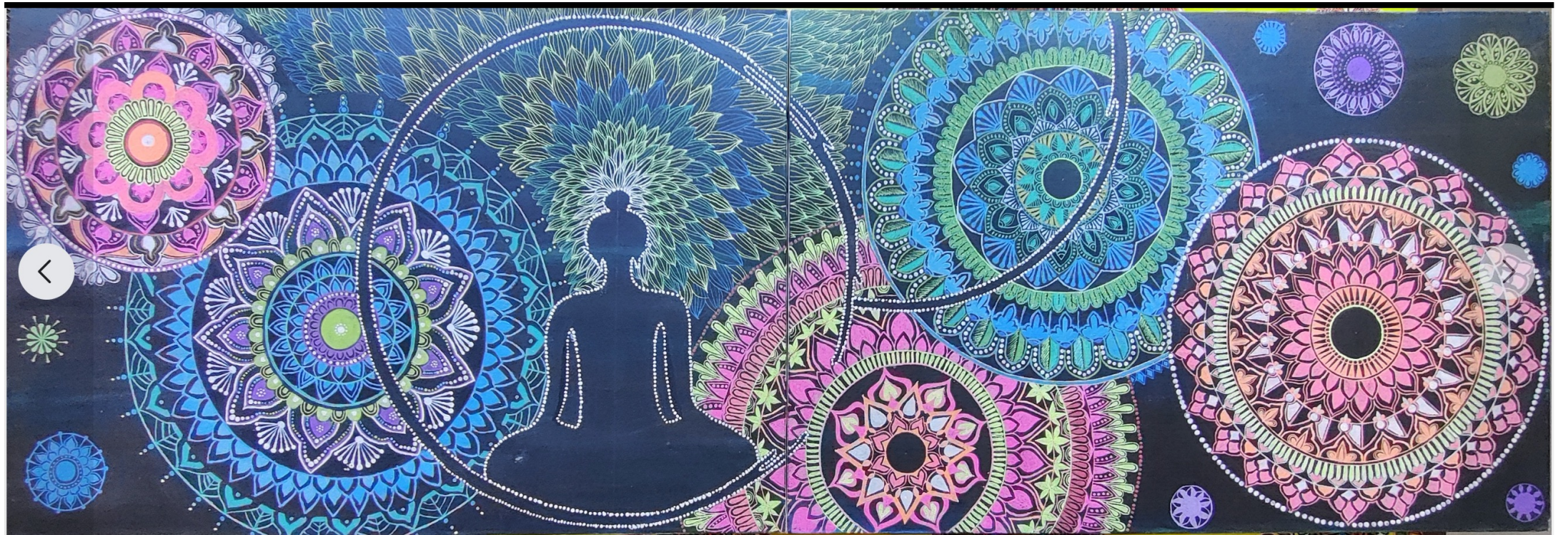
MY ACTIVITIES OUTSIDE ACADEMICS

Art: Photography, Painting.

Sports: Athletics (field and track), Swimming (all sorts of stunts, diving, front flips, back flips from elevated platforms), cycling, badminton, Yoga, Hiking.

(1) JOY OF CREATION

"A work of art.....provokes in us.....an image, which in our soul awakes surprise---sometimes meditation---often, and always, the joy of creation!"



(2) IN A DIFFERENT PARALLEL WORLD

Allows living in a different realm and strata. This shift (escape) is absolute necessity for me to contribute back to work. There's lot of issues (biased treatment, wrong behavior, bad day, professional conflicts, struck in research, etc. etc.) in life. Burst those bad-day-bubble, come out and breath some fresh air.



(3) BREAK PHYSICAL AND MENTAL LIMIT

A capable body and mind only can allow you to do anything else. You learn how to get up when you fall. That's more important. You breach your limit every day. You bond with people in the open beyond classroom and corridors. Follow the muscular monk, Vivekananda and the invincible Netaji Subhas. Afterall, I am from the same land.

(4) TAKE CARE OF YOURSELF

You will most often find yourself in the giving end. Being on committees for student mental health etc. What about yourself? Do you get enough self-care?

Stress Relief:

Boosts Self-Esteem

Healing:

Expressive Therapy: All inner emotions must find way out by some means! This is as necessary as beathing out!



PATIENCE, PERSISTENCE, MAGNANIMITY AND MORE

- Every good photograph that I have taken had stretched my limit of patience and perseverance.
- Waiting/walking tirelessly hours in the biting cold, or in the scorching sun, with hunger had been a normal for me. Having just one meal thought the day was also normal for me.
- My typical days for photography started as early as 2am.
- Even with my kid, on travel, our typical start time of the day is before 4 am.
- The more you know about the nature, the more magnanimous you become.

PHOTOGRAPHY- MY PASSION

Photography is my true calling.. Inspired by my travel.. I love nature, silence, solitude, away from mundane life. Hence started nature photography.

Poor PhD student: No access to any camera until I started earning my stipend at IIT Madras. Started with point and shoot during the PhD days. PhD money wasn't enough to buy high end camera.

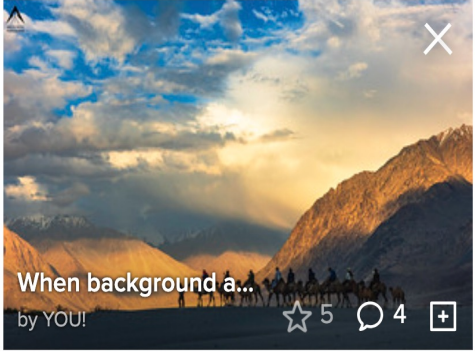
First Professional Camera: During post-doc, Travelling bug had bitten me in full force! And photography too. I purchased my first DSLR with my post-doc money. My mornings in the week-end would start at 2 am and end at 12 night. I would start off for a far-way place. It's just my camera, me and nature. Nature unfolded in her most stunning forms in front of me. Hiking for long hours.

Learnt to live alone! Learnt to be my own boss. People love going in a group. I hate grouping (except like-minded buddies)! I travel because I want to leave behind everything that is familiar. I want to own of my own schedule.

Second Professional Camera: Spent my EIGHT months salary from IISc (May-Dec) to buy my next level gadget

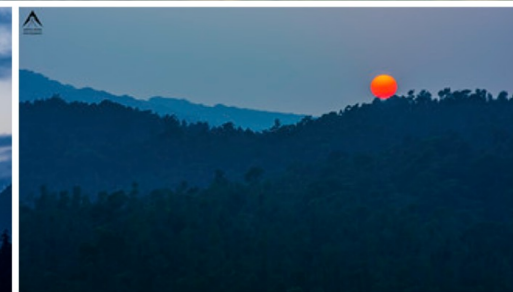
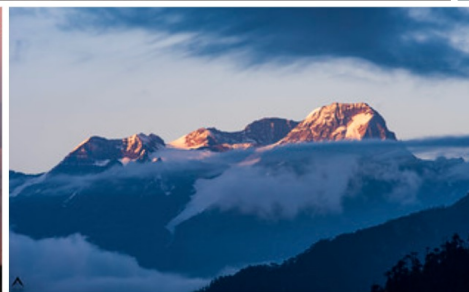
“ The Earth is **art**, the photographer is only a witness.”

PHOTOGRAPHY EXHIBITION



Testimony of
Enormous Patience,
Hardship

PHOTOGRAPHY EXHIBITION



2nd floor CSA.

A almost single-handed effort:
Buying papers and frames to
photo editing and printing
Infinite details, tasks involved in
this!

Thanks to Meenakshi for
supporting this idea and ACM for
sponsoring this partially.

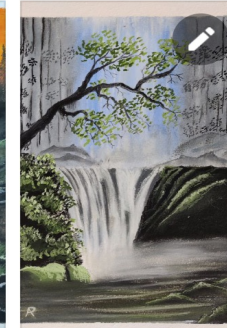
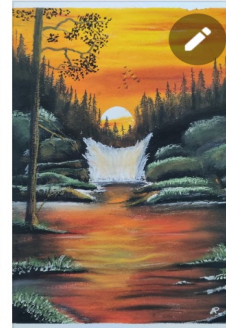
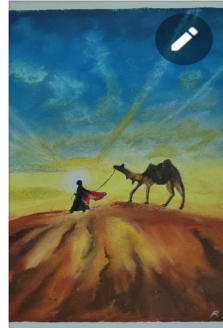
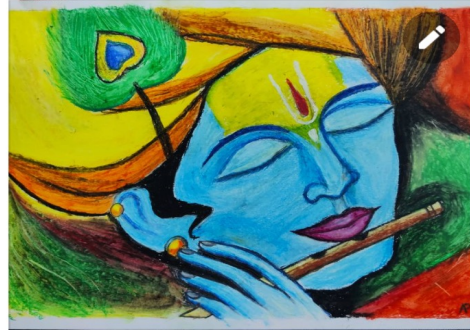
Shravani, Protik and Bhavish for
the help!

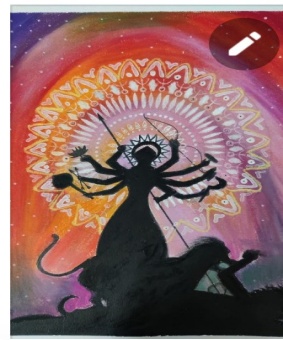
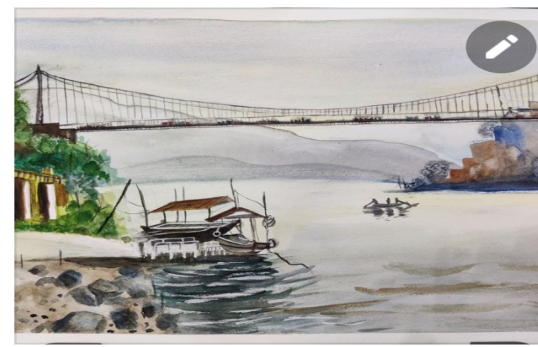
Photography page: <https://www.flickr.com/people/arpitapatra/>

PAINTING- MY PASSION

I in fact did not know that I can paint until 2021. My daughter initiated me to this. Life has its surprise in every turn. The catalysts come and change our lives for ever. I try out various styles, mediums. Those I cannot photograph, I paint!

+ Add to Album





SPORTS

Sports! Was never my forte. My legs would pain if I run.. My catalyst is my co-conspirator- Ashish 😊.

I can run 10km.

I can do Surya namaskar for more than 128 times in one go.

I can hike for 40-50 km in one stretch (often with 8-10 kg camera and lens in my back)

I can dive, flip from elevate platform

From beginner to intermediate player in Badminton

Now I reign IISc's sports picture not just amongst faculties, but also amongst students.



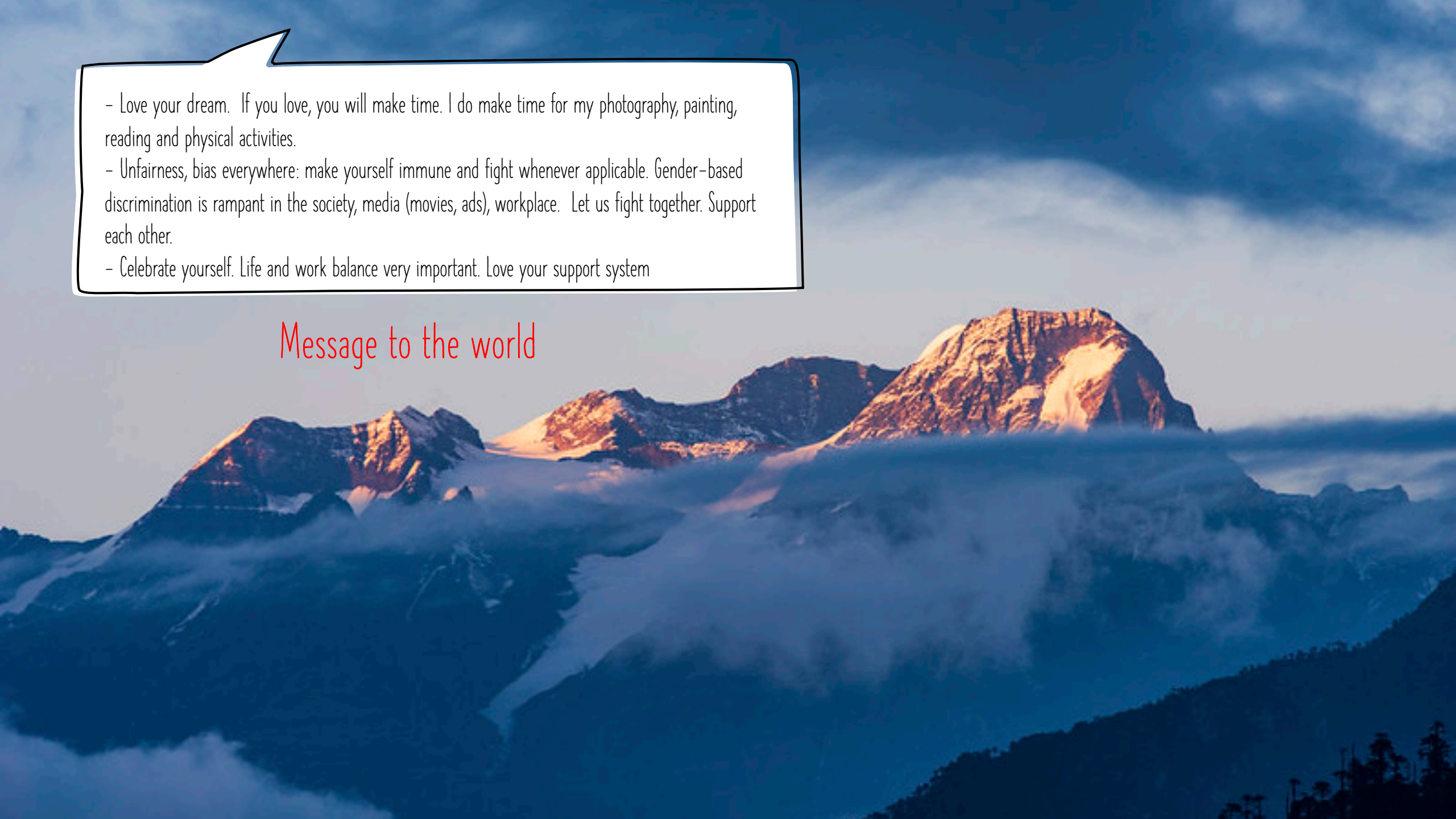
Spectrum 2023- 6 medals from 5km run, 800m run, javelin throw, back swimming, relay swimming, relay run.; EECS Sport meets: 4 medals

SPORTS



- Love your dream. If you love, you will make time. I do make time for my photography, painting, reading and physical activities.
- Unfairness, bias everywhere: make yourself immune and fight whenever applicable. Gender-based discrimination is rampant in the society, media (movies, ads), workplace. Let us fight together. Support each other.
- Celebrate yourself. Life and work balance very important. Love your support system

Message to the world



| Let your curiosity be greater than your fear |

THANK YOU!

Arpita Patra



PAINTING

“Art and science. To those who practice neither, they seem like polar opposites, one data-driven, the other driven by emotion. One dominated by technical introverts, the other by expressive eccentrics. For those of us involved in either field today (and many of us have a hand in both), we know that the similarities between how artists and scientists work far outweigh their stereotypical differences.”

“Science and art are often seen as disciplines with little in common. But research has [shown](#) that artistic and scientific creativity are closely correlated, in terms of psychological profiles, polymath tendencies, and mental strategies.”

ART AND SCIENCE

Leonardo Da Vinci – A perfect blend of Artist and scientist. His natural state of mind was to integrate art, design, engineering, and science.

The most famous paintings known today has always been a perfect mix of symmetry and color, tones, and angles.

He was a bridge engineer. Had drawn a bridge for Istanbul under the commission of Ottoman Empire. They rejected citing it as ambitious design. 499 years later another geneious engineer followed the original design and constructed the bridge in Norway (proving the headstrong Ottomans wrong)

Samuel Morse: Creator of the telegraph and Morse code. He was a great painter. He has a section in Louvre.

MY JOURNEY (UNDERGRAD)

Hurdles Galore: I was hell bent to study COMPUTER SCIENCE. I left EE in JU.

Up to 12th standard, I studied in Bengali medium. For the first time, I was reading all books in English.

Ridiculed for my colloquial language, rural mannerisms. TUMPA (Typical Uncultured Mindapurian People's Association)

In the end, I was the batch topper 😊

I didn't get a job in campus interview 😞 Friends happy with 20k salary. I said myself you cannot set such a small goal. March forward.

What's great: (1) only self-training (no good professors); (2) internship at IITB that changed my life

What's not great: (1) confession: my life's most unproductive time; I could not channelize my energy to creative things outside studies; (2) lonely time

Long term effect: (1) one can stay positive, in the most negative time. It's really on us.

MY JOURNEY (MASTERS)

Towards Great learning and great life at IITM: Enjoyed various computer science courses. "Advanced Algorithms" by Prof. C. Pandu Rangan created great inclination towards Theoretical Computer Science (TCS) and Cryptography which remain my love till date.

Was doing computer vision in Masters and decided to go for Cryptography in PhD

What's great: (1) I remain to be top-class performer at IIT (2) I met my better-half during this period

Long-term effect: Love for Theoretical Computer Science

MY JOURNEY (PHD)

The defining period of my life: At cross-road: whether to do in India or from USA.

Bold Decision: We (me and Ashish) took doing PhD in India as a big challenge. On the hindsight, missed a different, world-class learning experience. But on the positive side, I become an independent researcher on my own very soon and a self-made person. Starting from the first paper, I was the creator! All the self-training I did since my school days started bearing fruits.

New ideas! Great ideas! Ideas in dreams! Ideas while in the bathroom! Ideas coming from every direction 😊 Magical time. This is what I am born for.

But I didn't know that this very decision of doing PhD in India is going to impact my future in many ways.

What's great: (1) the joy of creating and of research; (2) joy of sharing knowledge (3) fitness freak; learnt martial arts

What's not great: gender-bias yet again: there are lab mates who congratulated my male co-authors, while I was the main contributor.

Long-term effect: I discovered what I am good at and what I am passionate about- cryptography

MY JOURNEY (POSTDOC)

Had grown as a more enriched researcher. Travelling bug had bitten me! And photography too. I purchased my first DSLR with my post-doc money. My mornings in the week-end would start at 2 am and end at 12 night. I would start off for a far-way place. It's just my camera, me and nature. Nature unfolded in her most stunning forms in front of me. Hiking for long hours. Learnt to live alone! Learnt to be my own boss.

What's great: (1) more research; (2) photography (3) travel

What's not great: Nothing

Long-term effect: (1) Discovered another passion: photography; (2) discovered that in the low time, travel and photography can repair my mood

MY JOURNEY (IISC:2014 ONWARDS)

Dreamy start: A dream came true. I wanted a research institute for my career. In addition, students who are mature and inclined to do research. What better place can one expect?

Juggling amongst, teaching research and life and photography

Spent first 6 months salary on a new camera!

What's great: (1) research friendly ambience; (2) students who are friends, sisters and brothers; you are into genuine relations; young people keeps you young mentally (3) campus

What's not great: prejudiced system; believes PhD earners from India not as good as PhD earners from abroad; discriminates people based on academic pedigree, gender; unfair advantage to certain people. I faced some major biases.

Realization: dream! come what may passionately love you dreams. Give your best. Don't think beyond.

MY JOURNEY (MOTHERHOOD)

Paradigm shift: I was all for the change. I wanted the change. It was crystal clear that I wanted it. And the conviction that I can do both together. I was not wrong. Starting something new due to peer pressure. My daughter, Aparajita, initiated me into painting

What's great: (1) life with little Aparajita; (2) got my parents close after a long hiatus

What's not great: Maternity leave is still called vacation by some!

Female faculty with x years experience vs male faculty x years experience. Both have similar profile. Judgement: Male faculty should get promotion earlier, because female faculty was on "vacation" due to child-birth.

Realization: dream! come what may passionately love you dreams. Give your best. Don't think beyond.