I envision a world where all life forms are dignified and free from exploitation, and all humans have access to freedom, justice, equity, and true democracy. I believe that a better future is possible through compassion and mutual understanding, where humanity thrives as a single global community, and growth harmonizes with nature, benefiting all and not just the privileged few. I dream that every individual has equal opportunities, access to knowledge, flourishing in an environment of fairness and sharing an aspiration for a better future, together.

One of the most potent instruments for sustainably sculpting this future is empowering people with knowledge through accessible, high-quality, and relevant education.

I believe that access to high-quality and relevant education is a potent instrument for sustainably sculpting this future. Pursuing this vision, I am dedicated to making quality education accessible to all.

Alongside, I enjoy exploring nature, photography, painting, music, and filmmaking.

In pursuit of this vision, I joined LabXchange, a free-to-all, web-based educational platform by Harvard University, where I contribute as a data professional, learning expert, and AI specialist.

**Academic research:**

I have been an academic researcher for 14+ years, focusing on cognition, learning, memory, cooperation, and foraging strategies in social animals, especially social insects. In my academic research, I used tools ranging from classical behavior science, ethology, and ecology, to modern computation like computer vision, data science, and artificial intelligence.

Before joining LabXchange, I worked as a post-doctoral research associate at Harvard University from 2018 to 2023. There, I worked on deciphering navigational decision-making in ants with <a href = "https://vnmurthylab.org/" target="\_blank">Venki Murthy</a> as primary PI and collective behavior with <a href = "https://www.physics.harvard.edu/people/facpages/mahadevan" target="\_blank"> L. Mahadevan</a> as collaborator PI. A substantial portion of my research here was focused on <a href = "https://github.com/Souvik-Mandal-Harvard/ES\_GPU" target="\_blank"> creating tools</a> to automate behavioral data collection from videos using computer vision and machine learning. A large chunk of my work was supported by the <a href = "https://brain.harvard.edu/grants/postdoc-pioneers-grant-program/" target="\_blank"> Harvard Brain Science Initiative Pioneer Grant </a> given to postdocs who take on risky projects that are pioneering in their lab, often involving developing new technologies. You can have a quick glimpse of my work in <a href = "https://www.mcb.harvard.edu/department/news/postdocs-jenny-chen-souvik-mandal-tadasu-nozaki-changwoo-seo-and-rebecka-sepela-awarded-fellowships//" target="\_blank"> this article</a>.

During this period, I created and taught a course Computational Ethology for three years (check below to access the course materials), collaborated with the Harvard Natural History Museum as an outreach scientist, and worked towards unionization of academic workers.

Before that, I explored the neurobiology of collective defense behavior in honeybees with <a href = "https://en.wikipedia.org/wiki/Martin\_Giurfa" target="\_blank"> Martin Giurfa </a> in Toulouse, France as a visiting scientist. Before that, I obtained my PhD in Behavior Science/ Behavioral Ecology from the Centre for Ecological Science at the Indian Institute of Science. This is the cradle of my life-changing learning on the philosophy and practice of science, strongly influenced by my mentor <a href = "https://sites.google.com/view/raghavendragadagkar" target="\_blank"> Raghavendra Gadagkar </a>.

I have been an avid enthusiast of science communication: Euraxess (the science outreach program from the European Union)