VISION OF DATA AND SOCIETY

Nitesh Chawla
Frank M. Freimann Professor of Computer Science and Engineering
Founding Director, Lucy Family Institute for Data and Society
Mission of the Lucy Family Institute is to enable positive impact on society and individual lives through innovative domain-informed and data-driven methods and applications.
Quoting Elinor Ostrom from her 2009 Nobel Prize Lecture, “when the world we are trying to explain and improve, however, is not well described by a simple model, we must continue to improve our frameworks and theories so as to be able to understand complexity and not simply reject it.”

**Quantified Self <-> Qualified Self**

How do we infer human narratives and impact?

“What people say
What people do
And what people say they do
Are entirely different things,” Margaret Mead
Data and Society: *convergent interdisciplinary program, founded on the principles of collaboration and shared outcomes, and sustained by communities of practice.*

Society is a collection of actors, organizations, and problems.
For Example,

How do we sense and collect multitude of data in response to a societal challenge?
How do we model/learn from data of multiple modalities?
How do we provide a detailed and timely understanding of a pressing society’s challenge?
How do we develop and sustain an action or intervention?
How do we ensure we are deeply attendant to the issues of ethics, equity, social responsibility and engagement?
How do emergent phenomena interplay with society?
WHAT DOES QUANTIFIED SELF TELL US ABOUT QUALIFIED SELF?
<table>
<thead>
<tr>
<th>Condition</th>
<th>Fact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stunting</td>
<td>21.3% of all children under 5 years were stunted in 2019</td>
</tr>
<tr>
<td>Wasting</td>
<td>14 million children under five years were affected by wasting in its severe form in 2019</td>
</tr>
<tr>
<td>Overweight</td>
<td>5.6% of all children under 5 were overweight in 2019</td>
</tr>
</tbody>
</table>

Visit [WHO's GHO website](https://www.who.int/gho/child-malnutrition/en/) for more information.

¡Hoy más que nunca, ellos nos necesitan!
Why Spending Time With Friends Is One of the Best Things You Can Do for Your Health

A growing body of research suggests that social health is just as, if not more, important to overall well-being.

Researchers have long attempted to boil healthiness down to a single, memorable metric. There's always been the number of pounds. Then came the 2,000-calorie daily diet. Today, wearables have emerged as the latest focus for data. There are step counters and stress trackers. But new research points to a surprisingly good, and very old, health indicator that you won't find on a weigh scale, a nutrition label, or your wrist. It's the structure of your friend group.
STRUCTURAL AND SOCIAL DETERMINANTS OF HEALTH PDT

Supports basic, clinical and translational research that

1) enables a deeper understanding of how social, economic, and environmental contexts shape patterns of health and wellness, including onset of diseases and disorders, within communities; and

2) informs effective treatments and interventions to promote equitable opportunities for good health and wellbeing among all people of Indiana.
To reap the benefits of Innovation:

1) alignment with societal needs and grand challenge problems,
2) algorithmic and data responsibility, and
3) knowledge of and compliance with best practices, coupled with a human-driven value system of sound judgment