

IAB TOPIC AREAS

AUTONOMOUS COMPUTING & AI

Q1. How do we automate decision making? Is there a minimum threshold?

Q2. How do we address metadata variability?

Q3. When do I have enough to make a decision?

Q4. Can we generate/track context when automating a process?

Q5. Why/What/How of monitoring the automation?

Example: Robotic process automation, Robo-advisors, IoT - smart cities, smart health, smart soldier; Personal Assistants

HUMAN-CENTRIC/SOCIAL COMPUTING

Q1. How do we provide on-demand and personalized information that will influence a human's social behavior

Q2. How do you provide this information on multiple form factors (AR/VR, mobile, etc)

Q3. How do you define behavior? human-human, human-machine, machine-machine, cyber-physical systems

Q4. How do you define personalization? I, We and Ours

Example - Social good, economic mobility, next gen skill sets, gender gap in jobs getting displaced as a result of digital transformations

OPERATIONAL COLLABORATIONS

VISUALIZATION & ANALYTICS

Q1. What is this data?

Big Data curation and quality

V's of data

Interface/Presentation of Data

Q2. How do we process this data?

Q3. How do we understand the results, while preserving the context?

Example: Visualizing enormous data sets - drug/pharmaceutical data, geo-spatial data - such as vehicles, people, trajectories

SECURITY, PRIVACY & GOVERNANCE

Q1. How do preserve privacy to securely share data and models with other entities within a specific domain? Ex - Banks sharing anti-fraud data and models.

Q2. How do we get to trust-worthy computing within ethical and security boundaries?

Example: trust worthy sensors, etc. This area is really cross-cutting multiple topic areas.

ETHICS

Q1. How do we define ethics within the realms of CVDI work?

Q2. Who is responsible (or accountable) for a bad decision?

Q3. Do ethics only apply when you have to make a choice between bad choices?

Q4. How do we differentiate between good and bad choices?

Example: This area is cross cutting other areas in this map

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LAB TOPIC AREAS

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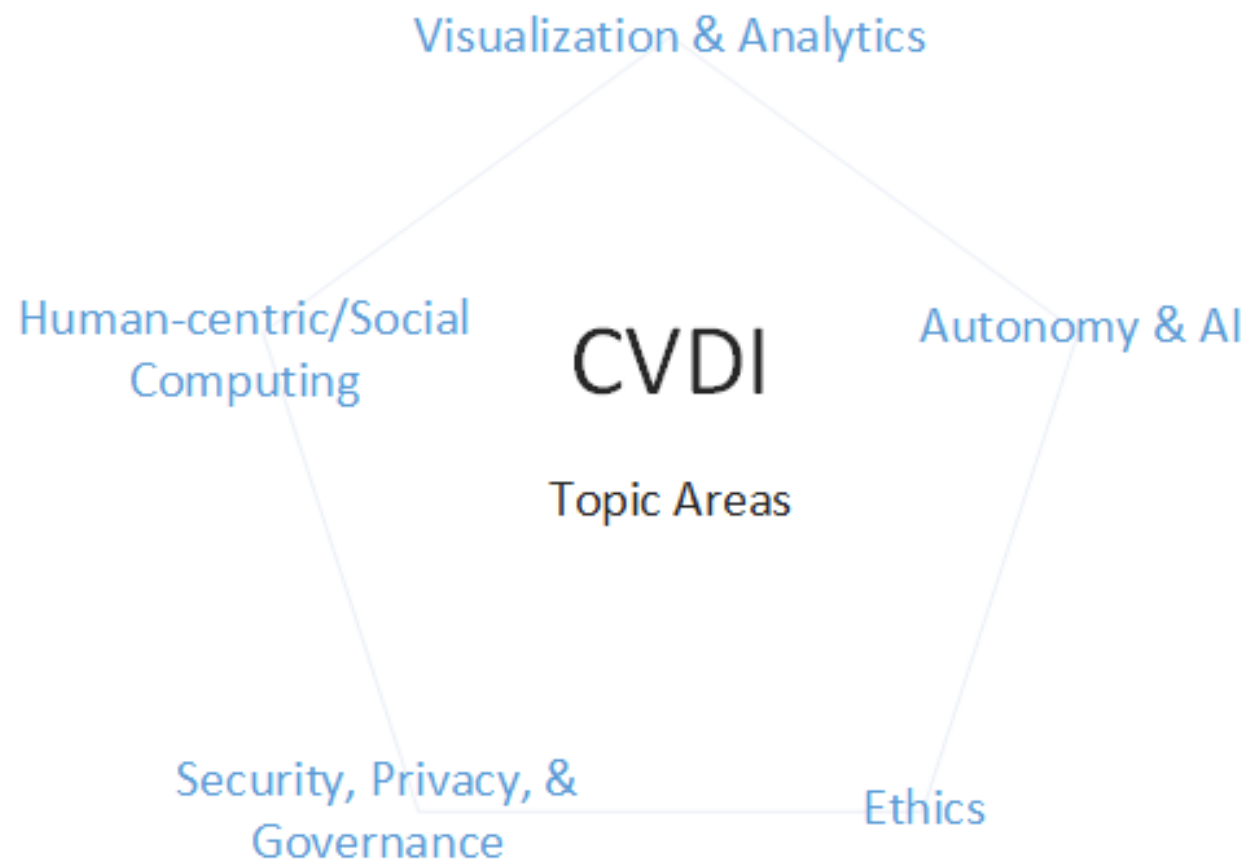
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Civilian Defense Law Health Cyber Security Manufacturing Education

Tools/SDKs APIs Applications Infrastructure



Deep Learning Machine Learning AI Big Data IoT Data Architectures Visualizations