Social Robotics
PDEEC PhD course on Social Robotics

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Cattell's 16PF personality model, [Cattell, 1965]

Factor	Low Score	High Score
Warmth	cold, selfish	supportive, comforting
Intellect	Instinctive, unstable	cerebral, analytical
Emotional Stability	Irritable, moody	level headed, calm
Aggressiveness	Modest, docile	controlling, tough
Liveliness	somber, restrained	wild, fun loving
Dutifulness	untraditional, rebellious	conformity, traditional
Social Assertiveness	shy, withdrawn	uninhibited, bold
Sensitivity	coarse, tough	touchy, soft
Paranoia	trusting, easy going	wary, suspicious
Abstractness	practical, regular	strange, imaginative
Introversion	open, friendly	private, quiet
Anxiety	confident, self-assured	fearful, self-doubting
Open-mindedness	close-minded, set-in-ways	curious, self-exploratory
Independence	outgoing, social	loner, crave solitude
Perfectionism	Disorganized, messy	orderly, thorough
Tension	relaxed, cool	stressed, unsatisfied

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Eysenck's personality model, [Eysenck, 1952]

- Extraversion/Introversion

  Extraverts are sociable and crave excitement and change, and thus can become bored easily. They tend to be carefree, optimistic and impulsive.

  Introverts are reserved, plan their actions and control their emotions. They tend to be serious, reliable and pessimistic.

- Neuroticism

  Neurotics/unstables tend to be anxious, worrying and moody. They are overly emotional and find it difficult to calm down once upset.

  Stables are emotionally calm, unreactive and unworried.

- Psychoticism

  Lacking empathy, cruel, loner, aggressive , and troublesome

The "Big Five" personality model I

- Often considered one of the most used in automatic personality analysis (see [Tupes, Christal, 1961], [Digman, 1990], [Goldberg, 1993], [McCrae, Costa, 2013])

- The 5 traits/factors/dimensions are
  - Neuroticism

    About being anxious, nervous, worried, and emotionally negative

  - Extraversion

    Sociability, assertiveness, cheerfulness, energetic

  - Openness to experience

    Reflective, imaginative, unconventional

The "Big Five" personality model II

- Agreeableness

  Tendency to be cooperative and considerate to others, relate to empathy and altruism

- Conscientiousness

  Organized, self-disciplined, and ordered

Emotions, behaviors, intelligence, personality, social relations

- How to make all these concepts compatible ?

  How should they influence the implementation of a social robot ?

- Could it be that emotions and personality are a consequence of some dynamics of an architecture, i.e., behaviors ?

- And the relation with intelligence ?

Seven Intelligences, [Gardner, 1983] I

1 Visual-Spatial

Think in terms of physical space, as do architects

2 Bodily-Kinesthetic

Use the body effectively, like a dancer or a surgeon. Keen sense of body awareness. They like movement, making things, touching.

3 Musical

Show sensitivity to rhythm and sound. They love music, but they are also sensitive to sounds in their environments. They may study better with music in the background.

4 Interpersonal

Understanding, interacting with others. These students learn through interaction

Seven Intelligences, [Gardner, 1983] II

5 Intrapersonal

Understanding one's own interests, goals. These learners tend to shy away from others.

6 Linguistic

Use words effectively. These learners have highly developed auditory skills and often think in words.

7 Logical-Mathematical

Reasoning, calculating. Think conceptually, abstractly and are able to see and explore patterns and relationships.

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