Placement Opportunities for Human Factors Engineering and Ergonomics Professionals In Industry, Government/Military and Consulting Positions

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During the period from November 1996 through October 1997, the Placement Service of the Human Factors and Ergonomics Society distributed announcements describing 200 new positions available for human factors engineers (HFE) and ergonomics professionals. This poster describes placement opportunities for HFE and ergonomics professionals in industry, government/military and consulting positions (N=150). Industry offered 62% of the positions, while government/military and consulting offered 23% and 15% respectively. The four leading industrial sectors: aviation/aerospace, consulting, computer software, and telecommunications accounted for 15, 14, 14, and 13 percent of the positions respectively. All full-time positions required a college degree. Ninety-five percent of the positions required a bachelors or masters degree. Fifty-three percent of the positions specified the masters degree as the minimum requirement, while five percent specified the doctorate. Two years was the median number of years of experience desired for most positions (range 0-10 years).

The area of expertise most frequently requested (69%) was Human Computer Interaction (HCI), with test and evaluation (specifically usability testing) being specified for 37% of the positions. The most frequently described primary area of responsibility was HCI (47%) followed by industrial ergonomics (13 %) and System Development (13%).

Salary was described as negotiable for eighty percent of the positions. Within the 30 positions for which salary was specified, salaries ranged from $35,000 to $100,000. The geographical areas with the most jobs were the Northeast (N=21), Southeast (N=18), and Southwest (N=17). The State of California accounted for 19 positions.

SPACE-DIMENSION AND THE BIOMECHANICAL AND PSYCHOLOGICAL ASPECTS IN STANDING-UP AND SITTING-DOWN MOVEMENTS

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In order to obtain a basic understanding of ergonomics regarding space- dimensions found in our dwelling spaces, measurements were taken on the space factors necessary to stand up from and also to sit down in a chair. In these movements, consideration was given to the relationship of the distance between the anterior side of the body and the wall. Within this context, the body movements and psychological intensity of pressure were examined. The primary controllable variables included the height of the chair seat and the distance from the front of the chair to the wall. The subjects were asked to stand up and sit down while biomechanical motion measurements were being made and then to answer questions regarding the psychological sensation of pressure caused by the closeness of the wall.

Main results obtained were as follows: (1) D (forward- and/or backward-displacement of the forehead during the movement) increased as L (distance between chair and wall) increased, but when L reached and passed 80cm, D took on an almost consistent value. (2) The relationship between X (minimum distance between forehead and wall) and R (value plotted on a numerical scale of pressure sensation) is shown by the following regression equation: $R = -4.103 \log X + 8.236$. (3) The subjects felt some sensation of pressure when $L \geqq$ 80cm, but when this was the case, their movements were quite natural as if the wall did not exist.