

# APPENDIX

## A. Bias Defining Words

By default, WordBias shows 5 kinds of biases namely Gender, Religion, Age, Race and economic. Following are the list of words used to compute bias scores for each of those categories.

### **Male** (Gender)

man,men,he,boy,boys,father,son,guy,male,his,himself,him,masculine

### **Female** (Gender)

woman,women,girl,she,mother,daughter,gal,female,her,herself,hers,feminine

### **Young** (Age)

Tiffany, michelle, cindy, kristy, brad, eric, joey, billy

### **Old** (Age)

ethel, bernice, gertrude, agnes, cecil, wilbert, mortimer, edgar

### **Islam** (Religion)

allah, ramadan, turban, emir, salaam, sunni, koran, imam, sultan, prophet, veil, ayatollah, shiite, mosque, islam, sheik, muslim, muhammad

### **Christainity** (Religion)

baptism, messiah, catholicism, resurrection, christianity, salvation, protestant, gospel, trinity, jesus, christ, christian, cross, catholic, church

### **Black** (Race)

aisha,keisha,tamika,lakisha,tanisha,latoya,kenya,latonya,ebony,rasheed,tremayne,kareem,darn ell,tyrone,hakim,jamal,leroy,jermaine

### **White** (Race)

emily,anne,jill,allison,laurie,sarah,meredith,carrie,kristen,todd,neil,geoffrey,brett,brendan,greg,m atthew,jay,brad,harris, nelson, robinson, thompson, moore, wright, anderson, clark, jackson, taylor, scott, davis,allen, adams, lewis, williams, jones, wilson, martin, johnson

### **Rich** (economic)

rich, richer, richest, affluence, affluent, wealthy, costly, lavish, luxury, plush, expensive, invaluable

### **Poor** (economic)

poor, poorer, poorest, needy, impoverished, economical, inexpensive, cheap, bankrupt, worthless, basic, plain

## B. Neutral Words

To quickly audit a given embedding for different biases, WordBias provides a set of words which should ideally be neutral for most kinds of biases like gender, race, etc. Following are the list of such neutral words based on different categories.

### **Profession**

teacher, author, mechanic, broker, baker, surveyor, laborer,,surgeon, gardener, painter, dentist, janitor, athlete, manager, conductor, carpenter, housekeeper, secretary, economist, geologist, clerk, doctor, judge, physician, lawyer, artist, instructor, dancer, photographer, inspector, musician, soldier, librarian, professor, psychologist, nurse, sailor, accountant, architect, chemist, administrator, physicist, scientist, farmer

### **Physical Appearance**

alluring, voluptuous, blushing, homely, plump, sensual, gorgeous, slim, bald, athletic, fashionable, stout, ugly, muscular, slender, feeble, handsome, healthy, attractive, fat, weak, thin, pretty, beautiful, strong

### **Extremism**

terror, terrorism, violence, attack, death, military, war, radical, injuries, bomb, target,,conflict, dangerous, kill, murder, strike, dead, violence, fight, death, force, stronghold, wreckage, aggression,,slaughter, execute, overthrow, casualties, massacre, retaliation, proliferation, militia, hostility, debris, acid,,execution, militant, rocket, guerrilla, sacrifice, enemy, soldier, terrorist, missile, hostile, revolution, resistance,shoot

### **Personality Traits**

adventurous, helpful, affable, humble, capable, imaginative, charming, impartial, confident, independent, conscientious, keen, cultured, meticulous, dependable, observant, discreet, optimistic, persistent, encouraging, precise, exuberant, reliable, fair, trusting, fearless, valiant, gregarious, arrogant, rude, sarcastic, cowardly, dishonest, sneaky, stingy, impulsive, sullen, lazy, surly, malicious, obnoxious, unfriendly, picky, unruly, pompous, vulgar

