**Model Write-up**

Parameters: **nseed** (number of seeds to start with), **ncoupons** (number of total coupons available)

Algorithm:

1. Assign each starting seed a covariate value. The covariate is sampled from a normal distribution of mean 0 and variance 1. Save the **nseed** covariates to the vector **covariates**.
2. Assign each starting seed a degree, or number of neighbors. The degree is sampled from a Poisson distribution of mean 3. Save the **nseed** degrees to the vector **degrees**.
3. Set the number of total recruited people to **nseed**.
4. **while** the number of total recruited people is less than **ncoupons**:

**for** each seed,

**for** each neighbor of the seed,

flip a coin with probability expit(covariate of seed)

**if** *success* **then**

the neighbor is recruited

assign the neighbor a covariate value, sampled from a normal

distribution of mean (covariate of seed) and variance 1.

Update **covariates** with list of neighbor covariates

Assign each seed a degree, sampled from a Poisson distribution of mean 3.

Increment the number of total recruited people by the number of recruited neighbors.